

AX - I - DENT - AX

EMPLOYEES' MAGAZINE

United States Smelting Refining and Mining Company
and Subsidiaries



Retrospection



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Volume 16

December - 1931

Number 12

Christmas Dinner

Howardsville, Colorado, December 25, 1882

**THE HON. THOS. M. TRIPPE, REPRESENTATIVE FROM SAN JUAN COUNTY,
GIVEN A COMPLIMENTARY DINNER BY HIS HOWARDSVILLE FRIENDS.**

One of the most happy and interesting social events of the holidays was the dinner given on Monday last, at the Watson House, in Howardsville, to Hon. Thos. M. Trippe, who was about to depart for Denver to attend to his duties as the Representative of San Juan County in the State Legislature. The dinner was prepared by W. D. Watson, and the bill of fare published below shows it to have been one of the most sumptuous repasts ever prepared in the San Juan. There were present on the occasion the following gentlemen, neighbors and friends of Mr. Trippe. John R. Curry, George N. Raymond, James D. McKay, John Ferrando, Peter Mario, Charles Fischer, E. W. Hunt, H. J. Forsyth, Albert Bernard, James H. Soward, W. D. Watson, G. H. Doyle, Archie Gibbs, A. J. Bourdeth, Robert Glatzal, Thos. Doyle, J. M. Lipponcott, J. C. Engel and William Alley.

BILL OF FARE

SOUP

Oyster

FISH

Baked White Fish

ROASTS

Turkey (Cranberry Sauce) Pork (Apple Sauce)

Loin of Beef (Brown Sauce)

STEWES

Chicken Fricassee

ENTREES

Quail on Toast

Escalloped Oysters

Baked Macaroni and Cheese

California Pear Meringue

VEGETABLES

Mashed Potatoes

Corn

Tomatoes

Fried Parsnips

Boiled Onions

RELISHES

Celery

Chow-Chow

Pickles

Tomato Catsup

Worcestershire Sauce

PUDDINGS

English Plum (Wine Sauce)

Corn Starch

PIES

Cocoanut Lemon Mince Apple

CAKES

Chocolate Cream Plum Pound Lemon

JELLIES

Raspberry Jam

Sherry Wine

FRUIT

Apples

Pears

Nuts

Raisins

Tea

Coffee

Chocolate

WINES

Port

Sherry

Angelica

Cider

LIQUORS

Brandy

Whiskey

Tom and Jerry

CIGARS

Wilson's Best

The occasion will be long remembered with pleasure by all who participated. Mr. Trippe departed for Denver Tuesday with the very best wishes of a constituency, who feel that in him they have a representative who will zealously work for the best interests of our whole county in matters of legislation affecting our interests.—From La Plata Miner, Silverton, Colorado, Saturday, December 30, 1882.

AX - I - DENT - AX

VOLUME 16.

SALT LAKE CITY, UTAH, DECEMBER, 1931.

NUMBER 12.

United States Smelting Refining and Mining Company and affiliated companies

United States Smelting Refining and Mining Company

Number One State Street, Boston, Massachusetts
Fifty-seven William Street, New York City
Newhouse Building, Salt Lake City, Utah

United States Stores Company

Newhouse Building, Salt Lake City, Utah
Dexter Horton Building, Seattle, Washington

United States Fuel Company

Newhouse Building, Salt Lake City, Utah
(Agents in all principal cities throughout the west)

United States Fuel Sales Agency

Newhouse Building, Salt Lake City, Utah

Hanover Bessemer Iron and Copper Company

Fierro, New Mexico

Hammon Consolidated Gold Fields

Nome, Alaska

Fairbanks Exploration Company

Fairbanks, Alaska

Compania de Real del Monte y Pachuca

Pachuca, Hidalgo, Mexico

U. S. S. Lead Refinery, Incorporated

East Chicago, Indiana

Utah Railway Company

Newhouse Building, Salt Lake City, Utah

United States Smelting Refining and Mining Exploration Company

Number One State Street, Boston, Massachusetts
Newhouse Building, Salt Lake City, Utah

U. S. Smelting Exploration, S. A.

Pachuca, Hidalgo, Mexico

Central Research Laboratory

Cambridge, Massachusetts

Customs Agent Office

Apartado Number One Hundred Seven
Vera Cruz, Mexico

Christmas by Injunction

By O. HENRY

O. Henry, whose real name was William Sidney Porter, was born in Greensboro, North Carolina, September 11, 1862, and died in New York City, June 5, 1910. He attended school until he was fifteen years old, and served an apprenticeship for five years as a clerk in his uncle's drug store in Greensboro. Then followed two years on a ranch in La Salle County, Texas, after which he moved to Austin, Texas, where he worked for a time as a book-keeper and later spent four years in the General Land Office. In 1891 he became teller of the First National Bank of Austin and soon after bought Brann's "Iconoclast," which he transformed into a humorous magazine, illustrated by himself. In 1896 he was indicted for embezzlement of funds in the bank at Austin. In 1898 he began a five-year term of imprisonment in the Ohio penitentiary which was reduced to three years and three months for good behavior. He began to write before he was sent to the penitentiary and continued his work there. His first contract as a writer was with The New York World in 1903 when he agreed to put out a short story each week for \$100 apiece.

O. Henry's own life is more or less reflected in his stories. During his eight years residence in New York City, he lived in obscurity and his stories of that

city are the most famous, but it is probable that some of his southern and western tales will be the most enduring. Some literary critics have condemned his work as being perishable and too "slangy." Regardless of that, however, he displays splendid imagination and especially brilliant skill as a narrator. His humor is immaculate and in none of his stories is

there reflected anything of a degrading or suggestive nature which is in strong contrast to some of the material published today.

His own vicissitudes and unfortunate experiences are probably reflected in his writings since they show a most chivalric tenderness for the unfortunate. His style is such that his stories may be reread again and again with added enchantment.

Published volumes of O. Henry include: Cabbages and Kings; The Four Million; The Trimmed Lamp; Heart of the West; The Gentle Grafter; The Voice of the City; Roads of Destiny; Options; Let Me Feel Your Pulse;

Whirligigs; The Two Women; Strictly Business; The Gift of the Wise Men; Rolling Stones; Waifs and Strays, and others. His stories have been translated into many languages.

"Christmas by Injunction" is from the Review of Reviews Company's "Heart of the West," published by Doubleday, Page and Company.—Editor.



O. Henry

Cherokee was the civic father of Yellowhammer. Yellowhammer was a new mining town constructed mainly of canvas and undressed pine. Cherokee was a prospector. One day while his burro was eating quartz and pine burrs Cherokee turned up with his pick a nugget weighing thirty ounces. He staked his claim and then, being a man of breadth and hospitality, sent out invitations to his friends in three States to drop in and share his luck.

Not one of the invited guests sent regrets. They rolled in from the Gila country, from Salt River, from the Pecos, from Albuquerque and Phoenix and Santa Fe, and from the camps intervening.

When a thousand citizens had arrived and taken up claims they named the town Yellowhammer, appointed a vigilance committee, and presented Cherokee with a watch-chain made of nuggets.

Three hours after the presentation ceremonies Cherokee's claim played out. He had located a pocket instead of a vein. He abandoned it and staked others one by one. Luck had kissed her hand to him. Never afterward did he turn up enough dust in Yellowhammer to pay his bar bill. But his thousand invited guests were mostly prospering, and Cherokee smiled and congratulated them.

Yellowhammer was made up of men who took off their hats to a smiling loser; so they invited Cherokee to say what he wanted.

"Me?" said Cherokee, "oh, grubstakes will be about the thing. I reckon I'll prospect along up in the Mariposas. If I strike it up there I will most certainly let you all know about the facts. I never was any hand to hold out cards on my friends."

In May Cherokee packed his burro and turned its thoughtful, mouse-coloured forehead to the north. Many citizens escorted him to the undefined limits of Yellowhammer and bestowed upon him shouts of commendation and farewells. Five pocket flasks without an air bubble between contents and cork were forced upon him; and he was bidden to consider Yellowhammer in perpetual commission for his bed, bacon and eggs, and hot water for shaving in the event that luck did not see fit to warm her hands by his campfire in the Mariposas.

The name of the father of Yellowhammer was given him by the gold hunters in accordance with their popular system of nomenclature. It was not necessary for a citizen to exhibit his baptismal certificate in order to acquire a cognomen. A man's name was his personal property. For convenience in calling him up to the bar and in designating him among other blue-shirted bipeds, a temporary appellation, title, or epithet was conferred upon him by the public. Personal peculiarities formed the source of the majority of such informal baptisms. Many were easily dubbed geographically from the regions from which they confessed to have hailed. Some announced themselves to be "Thompsons," and "Adamses," and the like, with a brazenness and loudness that cast a cloud upon their titles. A few vaingloriously and shamelessly uncovered their proper and indisputable names. This was held to be unduly arrogant, and did not win popularity. One man who said he was Chesterton L. C. Belmont, and proved it by letters, was given till sundown to leave the town. Such names as "Shorty," "Bow-legs," "Texas," "Lazy Bill," "Thirsty Rogers," "Limping Riley," "The Judge," and "California Ed" were in favour. Cherokee derived his title from the fact that he claimed to have lived for a time with that tribe in the Indian Nation.

On the twentieth day of December Baldy, the mail rider, brought Yellowhammer a piece of news.

"What do I see in Albuquerque," said Baldy, to the patrons of the bar, "but Cherokee all embellished and festooned up like the Czar of Turkey, and lavishin' money in bulk. Him and me seen the elephant and owl, and we had specimens of this seidlitz powder wine; and Cherokee he audits all the bills, C. O. D. His pockets looked like a pool table's after a fifteen-ball run."

"Cherokee must have struck pay ore," remarked California Ed. "Well, he's white. I'm much obliged to him for his success."

"Seems like Cherokee would ramble down to Yellowhammer and see his friends," said another, slightly aggrieved. "But that's the way. Prosperity is the finest cure there is for lost forgetfulness."

"You wait," said Baldy; "I'm comin' to that. Cherokee strikes a three-foot vein up in the Mariposas that assays a trip to Europe to the ton, and he closes it out to a syndicate outfit for a hundred thousand hasty dollars in cash. Then he buys himself a baby sealskin overcoat and a red sleigh, and what do you think he takes it in his head to do next?"

"Chuck-a-luck," said Texas, whose ideas of recreation were the gamester's.

"Come and Kiss Me, Ma Honey," sang Shorty, who carried tintypes in his pocket and wore a red necktie while working on his claim.

"Bought a saloon?" suggested Thirsty Rogers.

"Cherokee took me to a room," continued Baldy, "and showed me. He's got that room full of drums and dolls and skates and bags of candy and jumping-jacks and toy lambs and whistles and such infantile truck. And what do you think he's goin' to do with them inefficacious knick-knacks? Don't surmise none—Cherokee told me. He's goin' to load 'em up in his red sleigh and—wait a minute, don't order no drinks yet—he's goin' to drive down here to Yellowhammer and give the kids—the kids of this here town—the biggest Christmas tree and the biggest blowout that was ever seen west of Cape Hatteras."

Two minutes of absolute silence ticked away in the wake of Baldy's words. It was broken by the House, who, happily conceiving the moment to be ripe for extending hospitality, sent a dozen whiskey glasses spinning down the bar, with the slower travelling bottle bringing up in the rear.

"Didn't you tell him?" asked the miner called Trinidad.

"Well, no," answered Baldy, pensively; "I never exactly seen my way to.

"You see, Cherokee had this Christmas mess already bought and paid for; and he was all flattered up with self-esteem over his idea; and we had in a way flew the flume with that fizzy wine I speak of; so I never let on."

"I cannot refrain from a certain amount of surprise," said the Judge, as he hung his ivory-handled cane on the bar, "that our friend Cherokee should possess such an erroneous conception of—ah—his, as it were, own town."

"Oh, it ain't the eighth wonder of the terrestrial world," said Baldy. "Cherokee's been gone from Yellowhammer over seven months. Lots of things could happen in that time. How's he to know that there ain't a single kid in this town, and so far as emigration is concerned, none expected?"

"Come to think of it," remarked California Ed, "it's funny some ain't drifted in. Town ain't settled enough yet for to bring in the rubber-ring brigade, I reckon."

"To top off this Christmas-tree splurge of Cherokee's," went on Baldy, "he's goin' to give an imitation of Santa Claus. He's got a white wig and whiskers that disfigure him up exactly like the pictures of this William Cullen Longfellow in the books, and a red suit of fur-trimmed outside underwear, and eight-ounce gloves, and a stand-up, lay-down croshayed red cap. Ain't it a shame that an outfit like that can't get a chance to connect with a Annie and Willie's prayer layout?"

"When does Cherokee allow to come over with his truck?" inquired Trinidad.

"Mornin' before Christmas," said Baldy. "And he wants you folks to have a room fixed up and a tree hauled and ready. And such ladies to assist as can stop breathin' long enough to let it be a surprise for the kids."

The unblessed condition of Yellowhammer had been truly described. The voice of childhood had never gladdened its flimsy structures; the patter of restless little feet had never consecrated the one rugged highway between the two rows of tents and rough buildings. Later they would come. But now Yellowhammer was but a mountain camp, and nowhere in it were the roguish, expectant eyes, opening wide at dawn of the enchanting day; the eager, small hands to reach for Santa's bewildering hoard; the elated, childish voicings of the season's joy, such as the coming good things of the warm-hearted Cherokee deserved.

Of women there were five in Yellowhammer. The assayer's wife, the proprietress of the Lucky Strike Hotel, and a laundress whose washtub panned out an ounce of dust a day. These were the permanent feminines; the remaining two were the Spangler Sisters, Misses Fanchon and Erma, of the Transcontinental Comedy Company, then playing in repertoire at the (improvised) Empire Theatre. But of children there were none. Sometimes Miss Fanchon enacted with spirit and address the part of robustious childhood; but between her delineation and the visions of adolescence that the fancy offered as eligible recipients of Cherokee's holiday stores there seemed to be fixed a gulf.

Christmas would come on Thursday. On Tuesday morning Trinidad, instead of going to work, sought the Judge at the Lucky Strike Hotel.

"It'll be a disgrace to Yellowhammer," said Trinidad, "if it throws Cherokee down on his Christmas tree blowout. You might say that man made this town. For one, I'm goin' to see what can be done to give Santa Claus a square deal."

"My co-operation," said the Judge, "would be gladly forthcoming. I am indebted

to Cherokee for past favours. But, I do not see—I have heretofore regarded the absence of children rather as a luxury—but in this instance—still, I do not see—”

“Look at me,” said Trinidad, “and you’ll see old Ways and Means with the fur on. I’m goin’ to hitch up a team and rustle a load of kids for Cherokee’s Santa Claus act, if I have to rob an orphan asylum.”

“Eureka!” cried the Judge, enthusiastically.

“No, you didn’t,” said Trinidad, decidedly. “I found it myself. I learned about that Latin word at school.”

“I will accompany you,” declared the Judge, waving his cane. “Perhaps such eloquence and gift of language as I may possess will be of benefit in persuading our young friends to lend themselves to our project.”

Within an hour Yellowhammer was acquainted with the scheme of Trinidad and the Judge, and approved it. Citizens who knew of families with offspring within a forty-mile radius of Yellowhammer came forward and contributed their information. Trinidad made careful notes of all such, and then hastened to secure a vehicle and team.

The first stop scheduled was at a double log-house fifteen miles out from Yellowhammer. A man opened the door at Trinidad’s hail, and then came down and leaned upon the rickety gate. The doorway was filled with a close mass of youngsters, some ragged, all full of curiosity and health.

“It’s this way,” explained Trinidad. “We’re from Yellowhammer, and we come kidnappin’ in a gentle kind of a way. One of our leading citizens is stung with the Santa Claus affliction, and he’s due in town to-morrow with half the folderols that’s painted red and made in Germany. The youngest kid we got in Yellowhammer packs a forty-five and a safety razor. Consequently we’re mighty shy on anybody to say ‘Oh’ and ‘Ah’ when we light the candles on the Christmas trees. Now, partner, if you’ll loan us a few kids we guarantee to return ‘em safe and sound on Christmas Day. And they’ll come back loaded down with a good time and Swiss Family Robinsons and cornucopias and red drums and similar testimonials. What do you say?”

“In other words,” said the Judge, “we have discovered for the first time in our embryonic but progressive little city the inconveniences of the absence of adolescence. The season of the year having approximately arrived during which it is a custom to bestow frivolous but often appreciated gifts upon the young and tender—”

“I understand,” said the parent, packing his pipe with a forefinger. “I guess I needn’t detain you gentlemen. Me and the old woman have got seven kids, so to speak; and, runnin’ my mind over the bunch, I don’t appear to hit upon none that we could spare for you to take over to your doin’s. The old woman has got some popcorn candy and rag dolls hid in the clothes closet, and we allow to give Christmas a little whirl of our own in a insignificant sort of style. No, I couldn’t, with any degree of avidity, seem to fall in with the idea of lettin’ none of ‘em go. Thank you kindly, gentlemen.”

Down the slope they drove and up another foothill to the ranch-house of Wiley Wilson. Trinidad recited his appeal and the Judge boomed out his ponderous antiphony. Mrs. Wiley gathered her two rosy-cheeked youngsters close to her skirts and did not smile until she had seen Wiley laugh and shake his head. Again a refusal.

Trinidad and the Judge vainly exhausted more than half their list before twilight set in among the hills. They spent the night at a stage road hostelry, and set out again early the next morning. The wagon had not acquired a single passenger.

“It’s creepin’ upon my faculties,” remarked Trinidad, “that borrowin’ kids at Christmas is somethin’ like tryin’ to steal butter from a man that’s got hot pancakes a-comin’.”

“It is undoubtedly an indisputable fact,” said the Judge, “that the—ah—family ties seem to be more coherent and assertive at that period of the year.”

On the day before Christmas they drove thirty miles, making four fruitless halts and appeals. Everywhere they found “kids” at a premium.

The sun was low when the wife of a section boss on a lonely railroad huddled her unavailable progeny behind her and said:

“There’s a woman that’s just took charge of the railroad eatin’ house down at Granite Junction. I hear she’s got a little boy. Maybe she might let him go.”

Trinidad pulled up his mules at Granite Junction at five o'clock in the afternoon. The train had just departed with its load of fed and appeased passengers.

On the steps of the eating house they found a thin and glowering boy of ten smoking a cigarette. The dining-room had been left in chaos by the peripatetic appetites. A youngish woman reclined, exhausted, in a chair. Her face wore sharp lines of worry. She had once possessed a certain style of beauty that would never wholly leave her and would never wholly return. Trinidad set forth his mission.

"I'd count it a mercy if you'd take Bobby for a while," she said, wearily. "I'm on the go from morning till night, and I don't have time to 'tend to him. He's learning bad habits from the men. It'll be the only chance he'll have to get any Christmas."

The men went outside and conferred with Bobby. Trinidad pictured the glories of the Christmas tree and presents in lively colours.

"And, moreover, my young friend," added the Judge, "Santa Claus himself will personally distribute the offerings that will typify the gifts conveyed by the shepherds of Bethlehem to—"

"Aw, come off," said the boy, squinting his small eyes. "I ain't no kid. There ain't any Santa Claus. It's your folks that buys toys and sneaks 'em in when you're asleep. And they make marks in the soot in the chimney with the tongs to look like Santa's sleigh tracks."

"That might be so," argued Trinidad, "but Christmas trees ain't no fairy tale. This one's goin' to look like the ten-cent store in Albuquerque, all strung up in a redwood. There's tops and drums and Noah's arks and—"

"Oh, rats!" said Bobby, wearily. "I cut them out long ago. I'd like to have a rifle—not a target one—a real one, to shoot wildcats with; but I guess you won't have any of them on your old tree."

"Well, I can't say for sure," said Trinidad, diplomatically; "it might be. You go along with us and see."

The hope thus held out, though faint, won the boy's hesitating consent to go. With this solitary beneficiary for Cherokee's holiday bounty, the canvassers spun along the homeward road.

In Yellowhammer the empty storeroom had been transformed into what might have passed as the bower of an Arizona fairy. The ladies had done their work well. A tall Christmas tree, covered to the topmost branch with candles, spangles, and toys sufficient for more than a score of children, stood in the centre of the floor. Near sunset anxious eyes had begun to scan the street for the returning team of the child-providers. At noon that day Cherokee had dashed into town with his new sleigh piled high with bundles and boxes and bales of all sizes and shapes. So intent was he upon the arrangements for his altruistic plans that the dearth of childhood did not receive his notice. No one gave away the humiliating state of Yellowhammer, for the efforts of Trinidad and the Judge were expected to supply the deficiency.

When the sun went down Cherokee, with many winks and arch grins on his seasoned face, went into retirement with the bundle containing the Santa Claus raiment and a pack containing special and undisclosed gifts.

"When the kids are rounded up," he instructed volunteer arrangement committee, "light up the candles on the tree and set 'em to playin' 'Pussy Wants a Corner' and 'King William.' When they get good and at it, why—old Santa'll slide in the door. I reckon there'll be plenty of gifts to go 'round."

The ladies were flitting about the tree, giving it final touches that were never final. The Spangled Sisters were there in costume as Lady Violet de Vere and Marie, the maid, in their new drama, "The Miner's Bride." The theatre did not open until nine, and they were welcome assistants of the Christmas tree committee. Every minute heads would pop out the door to look and listen for the approach of Trinidad's team. And now this became an anxious function, for night had fallen and it would soon be necessary to light the candles on the tree, and Cherokee was apt to make an irruption at any time in his Kriss Kringle garb.

At length the wagon of the child "rustlers" rattled down the street to the door. The ladies, with little screams of excitement, flew to the lighting of the candles. The men of Yellowhammer passed in and out restlessly or stood about the room in embarrassed groups.

Trinidad and the Judge, bearing the marks of protracted travel, entered, conducting between them a single impish boy, who stared with sullen, pessimistic eyes at the gaudy tree.

"Where are the other children?" asked the assayer's wife, the acknowledged leader of all social functions.

"Ma'am," said Trinidad with a sigh, "prospectin' for kids at Christmas time is like huntin' in limestone for silver. This parental business is one that I haven't no chance to comprehend. It seems that fathers and mothers are willin' for their offsprings to be drowned, stole, fed on poison oak, and et by catamounts 364 days in the year; but on Christmas Day they insists on enjoyin' the exclusive mortification of their company. This here young biped, ma'am, is all that washes out of our two days' manoeuvres."

"Oh, the sweet little boy!" cooed Miss Erma, trailing her De Vere robes to centre of stage.

"Aw, shut up," said Bobby, with a scowl. "Who's a kid? You ain't, you bet."

"Fresh brat!" breathed Miss Erma, beneath her enamelled smile.

"We done the best we could," said Trinidad. "It's tough on Cherokee, but it can't be helped."

Then the door opened and Cherokee entered in the conventional dress of Saint Nick. A white rippling beard and flowing hair covered his face almost to his dark and shining eyes. Over his shoulder he carried a pack.

No one stirred as he came in. Even the Spangler Sisters ceased their coquettish poses and stared curiously at the tall figure. Bobby stood with his hands in his pockets gazing gloomily at the effeminate and childish tree. Cherokee put down his pack and looked wonderingly about the room. Perhaps he fancied that a bevy of eager children were being herded somewhere, to be loosed upon his entrance. He went up to Bobby and extended his red-mittened hand.

"Merry Christmas, little boy," said Cherokee. "Anything on the tree you want they'll get it down for you. Won't you shake hands with Santa Claus?"

"There ain't any Santa Claus," whined the boy. "You've got old false billy goat's whiskers on your face. I ain't no kid. What do I want with dolls and tin horses? The driver said you'd have a rifle, and you haven't. I want to go home."

Trinidad stepped into the breach. He shook Cherokee's hand in warm greeting.

"I'm sorry, Cherokee," he explained. "There never was a kid in Yellowhammer. We tried to rustle a bunch of 'em for your swaree, but this sardine was all we could catch. He's a atheist, and he don't believe in Santa Claus. It's a shame for you to be out all this truck. But me and the Judge was sure we could round up a wagonful of candidates for your gimcracks."

"That's all right," said Cherokee gravely. "The expense don't amount to nothin' worth mentionin'. We can dump the stuff down a shaft or throw it away. I don't know what I was thinkin' about; but it never occurred to my cogitations that there wasn't any kids in Yellowhammer."

Meanwhile the company had relaxed into a hollow but praiseworthy imitation of a pleasure gathering.

Bobby had retreated to a distant chair, and was coldly regarding the scene with ennui plastered thick upon him. Cherokee, lingering with his original idea, went over and sat beside him.

"Where do you live, little boy?" he asked respectfully.

"Granite Junction," said Bobby without emphasis.

The room was warm. Cherokee took off his cap, and then removed his beard and wig.

"Say!" exclaimed Bobby, with a show of interest, "I know your mug, all right."

"Did you ever see me before?" asked Cherokee.

"I don't know; but I've seen your picture lots of times."

"Where?"

The boy hesitated. "On the bureau at home," he answered.

"Let's have your name, if you please, buddy."

"Robert Lumsden. The picture belongs to my mother. She puts it under her pillow at nights. And once I saw her kiss it. I wouldn't. But women are that way."

Cherokee rose and beckoned to Trinidad.

"Keep this boy by you till I come back," he said. "I'm goin' to shed these Christmas duds, and hitch up my sleigh. I'm goin' to take this kid home."

"Well, infidel," said Trinidad, taking Cherokee's vacant chair, "and so you are too superannuated and effete to yearn for such mockeries as candy and toys, it seems."

"I don't like you," said Bobby, with acrimony. "You said there would be a rifle. A fellow can't even smoke. I wish I was at home."

Cherokee drove his sleigh to the door, and they lifted Bobby in beside him. The team of fine horses sprang away prancingly over the hard snow. Cherokee had on his \$500 overcoat of baby sealskin. The laprobe that he drew about them was as warm as velvet.

Bobby slipped a cigarette from his pocket and was trying to snap a match.

"Throw that cigarette away," said Cherokee, in a quiet but new voice.

Bobby hesitated, and then dropped the cylinder overboard.

"Throw the box, too," commanded the new voice.

More reluctantly the boy obeyed.

"Say," said Bobby, presently, "I like you. I don't know why. Nobody never made me do anything I didn't want to do before."

"Tell me, kid," said Cherokee, not using his new voice, "are you sure your mother kissed that picture that looks like me?"

"Dead sure. I seen her do it."

"Didn't you remark somethin' a while ago about wanting a rifle?"

"You bet I did. Will you get me one?"

"To-morrow—silver mounted."

Cherokee took out his watch.

"Half-past nine. We'll hit the Junction plumb on time with Christmas Day. Are you cold? Sit closer, son."

Midvale Smelter News

F. M. WICHMAN, Correspondent

With the Cadmium Plant again in operation, things have taken on a livelier appearance in that part of the yard.

Until the recent cold snap the exponents of "barnyard golf" have been busy during the noon hour. Chief Clerk Schuster makes a most artistic picture as he stands poised for a toss with a horseshoe in one hand and a sandwich in the other. But the ground is frozen now and Fred has substituted a copy of the Engineering and Mining Journal for the horseshoe, although he still makes use of the sandwich—another one, we mean.

When there is considerable railroad traffic on the tracks just inside the main gate you will see Jim Cotter, our safety first man, on hand to warn incoming truck drivers and careless pedestrians. Jim worries a good deal about that crossing, but perhaps his vigilance has saved human lives. Follow Jim's advice and you will not go wrong.

Our old friend, Doug. Jessup, since his return from South Africa, has gained quite a reputation as a lecturer. Within the past month or so he has addressed a number of organizations, including the American Institute of Mining and Metal-

lurgical Engineers, on matters pertaining to South Africa. He is scheduled to speak before the Exchange Club in the near future. His talks, as all who have heard him agree, are very interesting. He spent Thanksgiving Day with his brother in California.

While we do not mean to compete with the Utah Copper in open-cut mining, we really have developed quite a "mine" of that type in the old slag dump. Machine drillers are excavating the slag for re-treatment in the blast furnaces.

There is talk among old time stars of getting up a smelter basketball team. If you are interested in the game, get in touch with Hunter or Bartlett.

"Kelly" Hunter seems to have a lot of luck or uncanny ability in picking football winners and scores. He went home the other day with his pockets full of candy bars won from fellows at the Assay Office. We hope he doesn't get indigestion.

The annual inventory is keeping the warehouse crew out of mischief. Fred Hyke is assisting in the painting business.

Last month we overlooked mentioning that Clyde Swenson is the father of a new daughter.

Notes from Fairbanks, Alaska

O. J. EGLESTON, Correspondent

Colin F. McPherson and Miss Margaret Chisholm were wedded in the Catholic church Monday night, September 28. The marriage service was read by the Rev. Father S. E. Eline at 7:15 o'clock, with Douglas G. Preston and Miss Helen Durand as attendants. Mr. McPherson is one of our drill crew. He has been with us several years.

Mr. J. D. Harlan, manager of Hammon Consolidated Gold Fields at Nome, accompanied by Mrs. Harlan, flew to Nome on October 2, and will return to Fairbanks November 2. The time en route to Nome was five and a half hours; the distance about 650 miles.

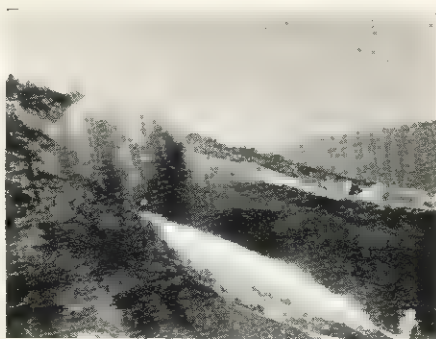
Dog teams have made their appearance here since the snow came early in October.

It is not often that the doctor meets with an accident, but when he does it is apt to be serious. Dr. de la Vergne, while taking a shower bath with a spray ring around his neck, standing in the bathtub, slipped on a rubber mat and fell, striking his head against a wash stand and finally landed in a dazed condition in a position from which it was difficult for him to get up. The shower ring kept on distributing water around the room. He finally got the water turned off.

The doctor says he received free medical treatment, but he did not participate in compensation. Doctor says that the real cause of the accident was that he was accustomed to a bathtub six feet long and the one he was in was only five feet

long and in stepping backwards he stepped on the sloping end. All bathtubs should be made without sloping ends. Showers should not be attempted in bathtubs. Safety First.

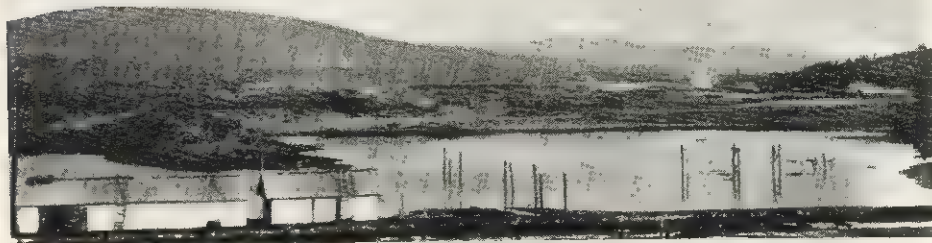
Bathtub accidents are usually amusing, but quite apt to occur. Safety devices in connection with bathing facilities should be provided wherever possible and the



Hydraulicking deep muck near Gilmore, summer, 1931. Fairbanks Exploration Company.

danger of electrocution from contact with electrical fixtures when in the bath should be thought of and guarded against.

Captain A. E. Lathrop recently made a visit to Fairbanks from the coal mine of the Healy River Coal Corporation, of which he is president. All of the coal used at this plant is furnished by the Healy River Coal Corporation, is good quality



Looking up Goldstream toward mouth of Engineer Creek. Pumping station for thawing left foreground. Fairbanks Exploration Company.

lignite, and burns well in our boilers, which were especially designed for its use. "Cap" Lathrop is a pioneer of Alaska and has many interests in the Territory. He is one of the real builders.

Efforts have been made to find a use for the peat moss which is found in abundance lying over the muck. Recently Mr. Ernest Walker Sawyer of the Department of the Interior has discovered that punk sticks can be made from peat moss. The burning of punk sticks is very useful in driving away mosquitoes. It is hoped that this may be developed so that the peat moss may be used and mosquitoes controlled economically.



Mess and bunk houses, Goldstream camp, Fairbanks Exploration Company. Thawing operations in foreground.

Mr. and Mrs. J. D. Harlan arrived from Nome by airplane November 7. They spent a month at Nome. The plane on which they traveled was obliged to land on account of darkness on the evening of the 6th near Tanana. The Yukon was frozen over only in spots so it was necessary to land on Fish Lake. The plane was equipped with skis.

Mr. F. M. Fenton, assistant superintendent on Goldstream, left for his home in Washington on November 2, to spend the winter. Mr. Fenton is a pioneer of Dawson, Y. T.

Mr. O. D. Cochran, lawyer of Nome, arrived on November 7 by airplane. He spent two days visiting friends here and looking over the company's activities. Mr. Cochran is a pioneer of Nome, having gone there in 1900. He has represented the second division in the Alaska legislature several terms.

L. W. Emerson, who has been doing engineering work here since last June, is leaving for Boston. While here he has made an investigation of the wells and water supply for the power plant condensers, designed some light weight portable conveyors for use on the ditches. Among other things he has done a lot of work on plans for the future operation of Dredge No. 3.

Wallace D. Wheeler, an elderly man living about seven miles up the Chena River from Fairbanks, was lost while hunting on October 14. He left his cabin with his gun during the absence of his partner and failed to return. As he was an old resident in the district, much concern was felt immediately about him and searching parties were organized and someone has been hunting for him ever since he was lost—October 14. On October 21, volunteers to the number of 103 searched all day but no trace of Mr. Wheeler was found. Several of the employees of this company were among the number that hunted for him. It is likely that Mr. Wheeler saw a moose and undertook to follow it and became exhausted, or stepped onto ice over a deep pool and was drowned.

ITALY LOSES \$54,000

Editorial Rooms
THE LITERARY DIGEST
354-360 Fourth Avenue
New York, N. Y.

November 12, 1931.

Mr. Edgar M. Ledyard, Editor
Ax-I-Dent-Ax, U. S. S. R. and M. Co.,
Salt Lake City, Utah.

Dear Mr. Ledyard:

You are to be congratulated for your perspicacity. I have just been going over the Federal Reserve figures which were used by the man who made that diagram. I find that the figure for Italy should be \$279,739,000 (rather than \$279,793,000 as shown in the diagram from the "Magazine of Wall Street."—Editor). This would account for most of that odd \$60,000.

Yours very truly,

B. P. ADAMS,
Financial Editor.

(See corrected figures in Ax-I-Dent-Ax for November, 1931.)

A Lament of the '60s

Of all sad words of woe or wail, the saddest are these: "no eastern mail."

The Commerce of Mexico

According to Empresa de Telefonos Ericsson, the total exports of Mexico in 1930 (latest available figure) amount to 450,674,489 pesos of which the United States absorbed more than one-half or \$267,512,914. During the same year imports amounted to 350,178,416 pesos, which includes machinery, tools, iron and steel products, automobiles, drugs, chemicals, lumber, paper, glass, china, shoes, hardware, etc. In 1930, 1,294,259 tons of coal were mined. During the past 30 years Mexico has produced 1,599,416,829 barrels of oil with a total value of \$2,902,372,152. Mexico has 48,540 manufacturing establishments employing a quarter million people. Nearly 6,000,000 acres are irrigated. Frijoles, known in the United States as kidney beans, is an important food crop of which approximately 2,000,000,000 pounds were produced in 1930. The importance of the 1930 corn crop is shown by a production of 15,750,000,000 pounds. Certain varieties of Mexican coffee are of exceedingly high grade; 90,000,000 pounds of all grades were produced last year. Mexico has within its borders nearly 6,000,000 cattle; 1,000,000 horses; 750,000 mules; 850,000 donkeys; some 2,500,000 sheep; approximately 5,500,000 goats and about 3,000,000 hogs.

The forests in Mexico are extensive and usually dense. Chiclé, mahogany, ebony, rosewood and cedar are much in demand and interest is being shown in other varieties of timber.

The 1930 record of metal products in pounds for 1930 is as follows: gold, 45,777; silver, 7,199,033; lead, 512,447,375; copper, 161,505,537; zinc, 272,983,741; mercury, 365,730; antimony, 6,670,864; arsenic, 21,948,940, and graphite, 12,875,515.

Railroads have kept pace with the industrial growth of Mexico and there are now some 7,500 miles of trackage; receipts of the railroads during 1930 were 112,921,000 pesos. Some 3,000 vessels entered Mexican ports from foreign countries carrying about 4,000,000 net registered tons.

There are 12,412 schools in the republic, 42,310 teachers and 1,682,371 pupils. According to the last census, (May, 1930) Mexico City has a population of 959,524; Guadalajara, 132,525; Puebla, 121,289; Monterrey, 136,101; Merida, 106,890; San Luis Potosi, 91,126; Vera Cruz, 71,989; Leon, 85,153; Torreon, 73,369; Aguas-

calientes, 81,612; Pachuca (headquarters of this company in Mexico), 46,659; Saltillo, 64,396; Orizaba, 42,925; Durango, 58,160; Chihuahua, 59,607; Toluca, 81,630; Morelia, 63,277; Queretaro, 75,434; Jalapa, 36,234; Mazatlan, 51,098.

The new Ambassador of Mexico to the United States, Dr. Jose Manuel Puig Cassauranc, arrived in Washington and took up his duties on Monday, October 26; he is 43 years old and a graduate physician of the National Faculty of Medicine in Mexico City. He served as a member of the legislature of the state of Vera Cruz in 1911-12; in 1914, head of the medical department of the Pearson Company; from 1915 to 1918, practiced medicine in New Mexico, U. S. A. He became interested in journalism and served as an editorial writer for "El Universal," the leading daily newspaper of Mexico. Later he was editor of "El Democrata," a leading Mexican daily. He has been Secretary of Public Education twice; Minister of Industry, Commerce and Labor. He is a member of several scientific societies; highly cultured, speaks English and French fluently and has an engaging personality. The post of Ambassador to the United States is Mexico's most important diplomatic position; Dr. Puig Cassauranc is well qualified for that place.

ARCH NELSON PRACTICES SAFETY FIRST

Here is one that is told about Arch Nelson of the Smelter Assay Office. He was on the football squad for three years without having had an opportunity to take part in a regular game and win his letter.

One day just before a hard game the coach rounded up his men for a final conference. The field was wet and a fine drizzle of rain was falling. The coach gave each man a bag of resin, telling them to wipe it on their hands and trousers. Each man got busy and the coach walked around giving each man his last minute instructions. Coming to Nelson he noticed that he was rubbing the resin on the seat of his trousers.

"Hey, Nelson," he exclaimed, "What's the idea?"

Arch looked at him and answered, "Well I've warmed the bench for three years and I don't want to slip off now."

—Contributed by Midvale Smelter.

We Believe It

BOTTLE RACES

Some eastern "high-pressure" executives are now turning to jigsaw puzzles like those sold in "five and ten" stores which amuse children and when properly put together, form maps, etc. "Big business" executives demand more complicated puzzles, some of which consist of 800 to 1000 pieces. Lindbergh started the younger generation off in flying stunts, which were followed by airplane "staying-up contests" and glider competitions. Poorer people had to content themselves with climbing a tree or a pole and remaining aloft until hunger or irate parents brought them down. One of the latest contests is "Bottle Traveling Races." During the summer of 1931, the steamer, Fulmar, operated by the Bureau of Fisheries, released 283 bottles in Lake Michigan and asked the public to cooperate in reporting the finding of bottles which contained notes, telling where they were released. The winning bottle was released at St. Joseph, Michigan, and found twenty days later at Sleeping Bear Point in Leelanau County, two hundred miles away. Aside from the beneficial exercise accruing to competitors while traveling up and down the beaches hunting for bottles, the Bureau of Fisheries learned something about the currents of Lake Michigan, which should be of value to navigators and fishermen. The bottles are sent to Ann Arbor, Michigan, local headquarters of the Bureau of Fisheries.

A SULPHUR SMELTER

Sulphur is widely distributed over the earth and almost every sizeable section has its sulphur mine. The successful smelting of certain western ores is economically possible only through their occurrence with sulphur. Until a few years ago, sulphur was mined the same as coal or iron. Then some ingenious individual conceived the idea of drilling holes in salt deposits, filling the holes with hot water, pumping the liquid solution out and evaporating it. This method proved a serious economic handicap to the ordinary producers of mined sulphur. Popocatepetl, Mexico's great quiescent volcano, was in days gone by a great sulphur smelter. During the presidential administration of Porfirio Diaz, a concession was granted to General Gaspar Ochoa to remove sulphur from the crater. Operations were

interrupted during revolutionary days but interest has been revived lately in the project and the work of removing sulphur from the crater will be resumed shortly if present plans carry. The ancient Aztecs used sulphur from Popocatepetl crater for medicinal purposes and two of Cortez' soldiers climbed into the crater and obtained sulphur for the manufacture of gunpowder.

UNTWINING TWINS

Professor H. H. Newman of the University of Chicago is advertising for "identical twins," who have been reared separately, for the purpose of carrying on scientific investigations. According to Professor Newman, "identical twins" have their troubles as babies for sometimes one of them gets two baths while the other one gets none at all. As children, one of the twins is frequently mistaken for the other with consequent errors in name identification. Twins may have some advantages when attending college. Two "identical twin" co-eds, who shortly came under our observation, were enabled to obtain college credits by alternately working and attending school, presenting each others credits; with some loss of knowledge, it must be admitted. Five cases of identical twins reared apart have been studied so far at the University of Chicago. The results of these studies show that some of the physical characters like weight, general health and disposition may be modified by environment but eye color, hair color, teeth and features are not changed. In other words, the environment modifies characters commonly known as intelligence and personality while hereditary resemblances are unaltered.

DEEPEST OIL WELL

Deep holes in the ground are nothing new to many readers of the Ax-I-Dent-Ax. An oil well was recently drilled near Seaciff, California, to a depth of 10,030 feet, 390 feet deeper than any well previously drilled. At the outset of operations, a bit, 27 inches in diameter was used; when a depth of 10,030 feet was reached, a 5-inch bit was used. It required a massive steel derrick, nearly 200 feet high, to handle the tremendously heavy equipment used in drilling the hole for when the bottom was reached, nearly 500,000 pounds of material was suspended at times. In addition to skill required in drilling holes into the

Whether You Do or Not

ground, the increase in heat as lower depths are reached is another factor to be taken into account. In the anthracite coal mining industries, temperature readings indicate an increase of about one degree in 55 feet. The temperature of one oil well in California at a depth of 6,500 feet showed slightly more than 210° F. while other shallow well records in Wyoming indicated that the temperature would reach about 500° F. at 10,000 feet. Oil wells should be "straight" but most of them are not. A device was invented which showed deflection. Drillers called the instrument "crazy," but when two wells, 500 feet apart, were being drilled and the holes "ran together," their doubts were removed.

SPEEDY INTERURBAN CARS

The "Quaker City," Philadelphia, is sometimes called slow by its rival, New York City. Regardless of the speed at which business transactions are carried on, it will soon have the fastest electric car in the United States when the aluminum speeders are built for the run between Philadelphia and Norristown, Pennsylvania. The new cars will be fish-like in shape and develop a speed of from eighty to one hundred miles an hour. Hundreds of tests were made at the University of Michigan tunnel laboratories on different shape models before the final car was selected. Ten of the new cars will be placed in service; each car will carry fifty-two passengers. If the cars make 100 miles an hour, how many minutes will be required to make the run between Philadelphia and Norristown, a distance of 13½ miles?

ELIMINATING THE MILLER

In the '50s, '60s, '70s and '80s, "going to mill" afforded somewhat the same pleasure as a game of golf does now. The grist mill, like the blacksmith shop, was a sort of broadcast station where all the news and gossip was dispensed. It is stated that in very early days farmers hung rocks on one side of horses or mules to balance the grain on the other side, until someone discovered that the grist of wheat could be divided and lighten the burdens one-half. Housewives in the future may order wheat from the grocer rather than flour or bread since an Italian has invented a machine that will convert grain directly into bread in the home.

When the grain is poured into the machine, it is ground into flour; the husks are rejected by it (possibly throwing out vitamin A, B, or C); the dough rises and is finally baked in an automatic oven. Some machines will be adapted to small households, others to large hotels. Apparently this inventor doesn't care what will happen to the miller, the baker or the grocer.

ELIMINATING CARBON PAPER

An ingenious attachment has been placed on the market which will, if it proves practical, eliminate the use of carbon paper for certain work. It is so simple that it is a wonder no one has thought of it before. Instead of a single ribbon which records the letters on the first sheet, one or more ribbons are used between the lower sheets making the required number of copies. A black ribbon, a red ribbon and a green ribbon may be used, indicating file copies, or other "colors" sent to certain departments or offices.

"SOME PULL"

The United States Bureau of Standards at Washington, D. C., carries on a great variety of tests, some delicate and others of magnitude. A testing machine has recently been devised for use there which is capable of exerting a pulling force of 2,300,000 pounds. This device has been used principally in testing anchor chains for ships.

DELICATE HEAVY-DUTY SCALE

The scales used in weighing gold, silver and other bars of metals at the U. S. S. Lead Refinery, Incorporated, East Chicago, Indiana, excite the admiration of those who visit that plant. Care must be exercised that the customer does not get too much gold or silver and the customer is likewise interested in not being short-weighted. Hence the precision of the instruments there and the skill required in operating them. A scale has recently been installed for use by the General Electric Company which has an upper load limit of fifty pounds. The scale is so delicate, however, that when loaded with fifty-pound weights on each pan, three light pencil marks will throw down the side on which the marks are placed. The approximate added weight of the pencil marks is about thirty-five millionths of an ounce—delicate enough for most purposes.

The San Juan Country

First of a Series of Articles

By EDGAR M. LEDYARD

Two a. m., October 12, 1492.

"Land!"

A word to conjure with after Spanish crews had spent thirty-five days on the unknown waste of the Atlantic ocean.

Like "water!" to members of the later Spanish expeditions on the trackless deserts of the west.

Columbus, of religious zeal was moved to Christianize the natives of the Indies; his royal patron, Isabella, was prompted through the same desire. After Columbus made his flattering report, his expedition was followed by many others.

But the reign of Ferdinand and Isabella was beset with financial difficulties; money was needed for the kingdom. In the desire to enrich the crumbling Spanish empire, missionary work was at times forgotten and many of the expeditions were planned and equipped to wrest riches from the New World; beginning of the search for precious metals in the Americas—as diligent today as ever.

India lay far beyond the new lands discovered by Columbus. Another Spanish expedition led by Magellan sailed from Spain for the "real" Indies on September 20, 1520, reached the Philippines (Ladrone Islands) on March 7, 1521, and Spain on September 6, 1522.



Obverse and reverse of coin found by Henry J. Forsyth at Howardsville, Colorado, 1919.

Magellan lost his life while fighting Filipino Islanders at Mactan. Elcano succeeded to the command. Of the five ships and 234 men which set out from Spain in 1520, only one ship and 18 men returned in 1522. While neither Columbus nor Magellan were Spaniards, to Spanish enterprise belongs the credit of discovery.

A Spanish ship was the first one to sail around the world; Spaniards were the

first people to explore the Gulf of Mexico; they were the first to learn that there was a North and South America; to Castellans belongs the credit of first looking on the Amazon and Mississippi, the two greatest rivers in the western continent.

Those who reflect on place names must be struck with those of Colorado, also with their geographical arrangement. The



PHOTO BY LEDYARD

Center: Mr. Forsyth's store and other buildings, Howardsville, where the coin was found.

northern part of the state shows the names of empire builders, journalists, statesmen and military leaders such as Moffat, Garfield, Denver, Greeley, Sedgwick, Washington, Adams, Pitkin, Elbert. The eastern and southeastern portion commemorate the names of pathfinders like Kit Carson, Gunnison, Bent and Indian tribes like Cheyenne, Kiowa, Pueblo. In the southwest portion are recorded Montrose, San Miguel, Dolores, Montezuma, San Juan, La Plata, Archuela, Conejos, Rio Grande, Alamosa, Durango, Cortez, Mancos, Arastra, Mesa Verde, Pagosa and Juanita, with many others of Spanish origin.

Since the Spaniards were the first explorers of the southern portion of the United States west of the Mississippi river, we may reasonably conclude that this section is the oldest historic part of Colorado.

It is fairly well established that Coronado entered or passed very close to the southwest section of what is now Colorado in search of the fabled "Seven Cities of Cibola" as early as 1540. Some years before the settlement of Jamestown, Juan de Onate planted a colony near the junction of the Chama and Rio Grande rivers; the settlement may be traced today, according to Hall. While the junction of the Chama and Rio Grande rivers identify this place as being in New Mexico, there is hardly



Forsyth's store, Howardsville; George W. Howard leaning against corner of building.

any doubt that these early adventurers were well acquainted with southwestern Colorado and frequently penetrated its borders.

A few years later, the same Juan de Onate, who established the "junction city" in northern New Mexico, founded Santa Fe. Both of these settlements antedate any in California and are respectively second and third to St. Augustine, the first Spanish settlement in North America.

Some French traders arrived at the present site of Denver on July 20, 1799. The first American, James Purcell, a fur trader invaded Colorado in 1803; Zebulon M. Pike, military officer and topographer, followed in 1806; and Major S. H. Long continued Pike's work in 1819 and '20. The names of Pike and Long are commemorated in enduring natural landmarks — Pike's Peak and Long's Peak.

For four years, 1828 to 1832, La Junta was a fortified Arkansas valley post on the Santa Fe trail. From 1834 to 1836 private forts were erected along the Platte and in 1841 the first overland emigrants to the Pacific coast crossed Colorado. In 1846 and '47, the Mormons made a temporary settlement at the old Mexican town of Pueblo. Fremont explored the re-

gion in the '40s and gave us a word and map picture of the country.

Colorado owes its discovery to the search for wealth by the Spaniards and its colonization to the discovery of minerals by Americans. Previous to the Denver gold rush of 1858, the only settlement of importance in the state was the obscure one of Julesburg on the overland wagon trail. After the discovery of gold in Denver in 1858, there was a continuous stream of emigration. The gold camps of Breckenridge, Empire, Gold Hill, Georgetown and Mill City were located in 1830 and '61.

Historical writers have, as a rule, entirely overlooked southwest Colorado. This section is not only the oldest part of Colorado from the viewpoint of historical exploration, but it contains the greatest group of prehistoric dwellings not only in Colorado but also in the United States, those of Mesa Verde National Park.

Neither does southwestern Colorado lag far behind other parts of the western United States in mining history. Baker took a party into the beautiful valley now occupied by Silverton, formerly Baker's Park, and began work there in 1860, just below the present Sunnyside Mining and Milling Company's mill at Eureka.



PHOTO BY LEDYARD

First court house in San Juan County; Howardsville.

So much for a brief historical record. July 29, 1776.

Dominguez and Escalante, Franciscan Friars, traveled north from Santa Fe in search of a route to Monterey. They made nine leagues the first day. In their wanderings they pass through southwest Colorado and as far north as Jensen, Utah.

A record of their trip has been preserved; is there any other evidence of their journey?

The discovery of a coin found by Mr. Henry J. Forsyth, a resident of Howardsville since 1880, may be an answer to this question. In the spring of 1919, Mr. Forsyth decided that a cellar was necessary. While excavating, he found a Spanish coin at a depth of seven feet. The coin was sent to the Smithsonian Institution and the following answer received:

"Smithsonian Institution
"United States National Museum
"Washington, D. C.

"Office of Administrative Assistant to the Secretary in Charge U. S. National Museum.

"July 18, 1919.

"Dear Madam:

"The coin which you transmitted on June 6 has been examined by Mr. T. T. Belote, Curator of History, who reports as follows:



Former residence of the late Thomas M. Trippe, early surveyor, Howardsville.

"The coin is a Spanish two real piece issued during the reign of Charles III in 1772 apparently, although the date is not entirely clear as regards the last figure."

"The Museum does not undertake to estimate the value of old coins, but this information can be secured from dealers such as Lyman H. Low, 28 Clinton Place, New Rochelle, New York, and Henry Chapman, 333 South 16th Place, Philadelphia, Pennsylvania.

"The coin is returned herewith.

"Very respectfully yours,

"W. deC. RAVENEL,

"Administrative Assistant to the Secretary.

"Miss Anna Nelson,
"Howardsville, Colorado."

As will be seen later, the circumstances under which the coin was found are much more significant than the coin itself. A letter regarding the origin of the coin was written to Mr. A. B. Marquand, formerly general manager of the Sunnyside Mining and Milling Company at Eureka, now connected with the Compania de Real Monte y Pachuca at Pachuca, Mexico, two subsidiaries of the United States Smelting Refining and Mining Company. A member of the staff wrote the Mexican national mint; the following is an excerpt from a letter received:

"Translation

"Mexican Mint,

"Correspondence of the Director.

"Mexico, September 18, 1931.

"Lawyer Don Adrian Rodriguez,
"Cia de Real del Monte y Pachuca,
"Pachuca, Hgo.

"Dear Sir:

"In reply to your kind letter of the 11th instant, I take pleasure in advising that from the historical data available, the first silver coins were coined in Mexico in the year 1537, beginning with those of one 'peso,' four 'reales,' three 'reales,' two 'reales,' one 'real,' and one-half 'real.' On June 28, 1542, there was authorized the coining of copper in pieces of four and two 'maravedis.' By Royal Decree of February 25, 1675, the coining of gold was permitted, it being ordered by decree of May 20, 1676, that the fineness should be 22 karats, the coining rate 68 pieces of 'escudos,' of a value of 440 'maravedis' each.

"Regarding the time when the Spanish coins went out of circulation, we have the decree of August 1, 1823, that created the National Coin, which was effected by changing the emblematical part of the colonial coin of both metals, the Coat of Arms of the Republic being engraved thereafter, retaining its fineness and its weight. * * *

"I take this opportunity to remain,

"Yours very truly,

"FRANCISCO VALDES."

Had the coin been found on the surface, its occurrence there may have been ascribed to some of the Santa Fe expeditions of the seventies. Mr. Forsyth has been acquainted with the site of his pres-

ent home for 52 years and at the time he settled there, there was no evidence of recent disturbances; trees and brush were growing in 1880 as at present.

In the intervening years, however, between 1776 and 1860, when the Baker party first entered the valley, many changes have occurred through erosion and subsequent filling of the valley.

Mr. Marquand, referred to above, who lived at Eureka a few miles above Howardsville, for a number of years, has the following to say regarding erosion in the upper Animas River valley:

"Each year during the June flood, rolling rocks coming down Eureka creek would wake us in the night with their booming. This same creek, in one year, cut out half the blacksmith shop and almost put what was recently the Fleming house, down the river. Since I first went to Sunnyside it has taken away a good part of the flat to the south of where it joins the Animas River, together with an old barn and some fairly large trees. The Animas River took out a part of the house next to the Fleming house, removed a large slice of a flat back of the filter plant, washed everything out including the road near the club house, washed out the Silverton Northern railroad for several hundred feet—all at different times. It is only by constant dry walling and cribbing that anything is held in place from Animas Forks to Silverton. An immense tonnage has been removed near Howards-

ville. The Howardsville bridge was previously only about one-half as long as it now is due to cutting away the banks of the river. Side streams have, at times, covered the Silverton-Eureka road to a depth of many feet with dirt, sand and gravel for long distances, along with boulders weighing up into the hundreds of pounds, all of which finally goes down the Animas River and is well broken up in many rapids below Silverton."

Mr. L. F. Paddison of our company tells me that many fan-shaped talus deposits have been and are being formed in the Animas River valley at the mouths of longer canyons like Cunningham Gulch where these canyons drain good sized water sheds.

On some of these talus deposits where destructive floods have not occurred repeatedly, there are good tree, brush and grass covers.

The curator of history raised a question about the date, but examination shows that it is plainly 1773; there is no doubt whatever regarding the obverse side of the coin since the date and inscription are entirely legible. There was some difficulty in reconstructing the reverse side; thanks are extended to Mr. Norman Schultz, coin collector of Salt Lake City, for assistance in working out the details.

Was the coin distributed by Dominguez and Escalante or other members of their expedition? The answer to this question may never be known positively.



PHOTO BY LEDYARD

George W. Howard's Cabin, Howardsville

The report of the Mexican government mint, geological and botanical evidences indicate that it must have found its way into this section long before the advent of Baker and his party in 1860. Sufficient time would have to elapse to produce a cover over the material which was carried down the sides of the canyon to form the talus bench in which the coin was deposited and where Howardsville now stands.

According to the map accompanying "The Catholic Church in Utah" which contains a translation of the "Diary and Travels of Fray Francisco Atanasio Dominguez and Fray Silvestre Velez de Escalante," edited by the Very Reverend W. R. Harris and published by the Inter-mountain Catholic Press in Salt Lake City in 1909, Escalante entered Colorado at the intersection of 37° north latitude, which is the south line of the state, and 107° west longitude. References to various mesas, canyons and rivers and especially one to the river Chama would indicate that the route has been apparently rather carefully traced to this point. The diarists were well acquainted with the country and make references to junctions of well known streams with the San Juan.

According to this same map, the route followed a general west-northwestern course from the lower center of what is now Archuleta county partly through Colorado to a point a little south of the west center of what is now Mesa county. This has also apparently been accurately platted by references to the Dolores river, the Mancos river, the Sierra de la Plata range, (the eastern portion of which was called the Sierra de la Gulla by Escalante) and various valleys described as being suitable for agriculture.

On August 8 and 9, the Fathers made the following record in their diary:

"8th day of August. (1776-E.M.L.). We left the River Pinos and Plain of San Cajetan to the west-northwest, and going four leagues arrived at the River Florida, which is much smaller than the River Pinos. It rises in the same mountain range, but more to the west, flows from north to south, and in the place where we crossed it there is a large tract with good soil, if well irrigated. The pasturage on the plain is good, but near the river not so good, though in the rainy season it may be better. Passing the River Florida, we traveled west two leagues, and two more

to the west-northwest. Descending a stony hill, we came to the River de las Animas, near the western slope of the Plata range, where the river rises. Crossing, we halted on the opposite bank. It is as large as the northern river, and at this season contains more water and has a swifter current, having more of a decline at this point. Like the other rivers, it empties into the Navajo. The banks are steep, and here the pasturage is not good, though farther on and lower down it is better.

"To-day, a little more than eight leagues.



George W. Howard, "the Lieut. Howard of the Baker party," resident of Howardsville for many years.

"9th day of August. We left the River Animas (River of Souls) and climbed the western slope. Although it is not very high, it is difficult, being rocky and in parts very steep. We crossed the summit of a little mountain, which would make the distance traveled about a quarter of a league, and entered a fertile glen, through which we went a league to the west, then turning to the northwest, skirted the foot of a green mountain with good pasturage,

and came to the San Joaquin river. As it passes through the town of San Geronimo it is small. It rises in the western part of the Sierra de la Plata, and flows through the same canon, in which are said to be open veins of metal; although when some years previous parties came to examine these mines, by order of the governor, Don Thomas Velas Cachupin, they could not say for certain what metal they contained. According to the opinion of some who lived in this section, and from reports gathered from the Indians, they concluded it was silver, thus giving the name to the mountain range.



Francis M. Snowden, who built the first house in Silverton.

"From the slope of the River Animas to that of San Joaquin the land is not very moist, while in the immediate vicinity of the Sierras the rains are very frequent, so that on the mountains which are covered with tall pine trees, small oak and a variety of wild fruit trees, the pasturage is of the best. The temperature here is very cold, even in the months of July and August. Among the fruits growing here there is a small one, black in color, with an agreeable flavor, very much like the

fruit of the medlar trees, though not so sweet. We went no farther that day, because the animals had not sufficient food the night before, and seemed tired, and also because of a heavy rain storm that compelled us to remain.

"Today, four and a quarter leagues, almost due west."

The River Florida rises in northeast La Plata county and discharges into the Rio del las Animas about four miles north of the Colorado line in the south central portion of La Plata county while the River Pinos runs through the eastern part.

After they crossed the Florida river, they proceeded some five miles west and five miles north where they struck the Las Animas. Pasturing was better above than below, not good at the place where they crossed. The San Joaquin river of Escalante is known today as the La Plata river.

GUSTAVE H. BACKMAN

In the death of Gustave H. Backman on Monday, November 23, Salt Lake City lost one of its foremost civic and business leaders.

Mr. Backman was born in Gothenburg, Sweden, May 18, 1864, and came to America alone in 1877. He has been a resident of Salt Lake City for more than one-half of a century.

He attended the old University of Deseret and later studied law and was admitted to the bar in 1899. In his practice he specialized in probate and real estate cases.

At the time of his death, he was chairman of the Board of Education, chairman of the Public Library Board, a member of the Board of Adjustment City Zoning Commission, president of the Intermountain Title and Guaranty Company, and a member of the Board of Directors of Zion's Benefit Building Society.

In addition to Mrs. Grace Pollard Backman, he is survived by five sons, Gus P., LeGrande P., Milton V., Ralph V., Harold S., and two daughters, Mrs. Lucille B. Glade and Edna Louise Backman, all residents of Salt Lake City. A son, Mr. Gus P. Backman, is general secretary of the Salt Lake City Chamber of Commerce.

Mr. Backman will be missed by his business associates and a multitude of friends to whom he was a kind counselor.

The Devious Paths

FOOD SHORTAGE IN SAN FRANCISCO AND SALT LAKE CITY

In the minds of some, early residents of San Francisco and Salt Lake City were presumed to drink heavily, brood over their troubles and go to bed early and hungry. This was not always the case as shown by the following records. Mr. M. L. Winn landed in San Francisco in 1849 without a penny in his pocket. He began as a street peddler of candy, started two restaurants both of which burned up. In July, 1851, he inaugurated his famous "Fountain Head" which was supplemented in January, 1853, by another high class restaurant known as "Winn's Branch Extension." Both were celebrated for their gentility, cleanliness and total absence of all spirituous and intoxicating drinks. On the 6th of April, 1854, the following account appeared in the San Francisco "Commercial Advertiser":

"We learn from Mr. Winn that the average number of persons entering his two establishments daily, to satisfy the cravings of hunger, are 3,000. He has 100 attaches to the two houses, at an average salary of \$90 per month and board. The meat bill, per month, is \$8,000; flour bill, \$4,000; milk, \$2,000; sugar, \$3,000; butter, \$200; other items necessary to carry on the two establishments, \$5,000; rents in both places for one year, \$54,000; improvements in both places during the last year, \$31,000; can seat in both places 450 persons at one time; paid for ice and eggs last season, in five months, \$28,000, more than has ever been paid in same length of time before or since; has sold in one day, 1,500 glasses ice cream. This was on July 4th, last year (1853.) Keeps 80 lights burning in both places every night; oil bill, \$500 per month; 1,000 flour barrels used to pack soda crackers to be sent into the country; manufactures and sends into the country about 600 fifty-pound boxes of candies; packs from 200 to 300 boxes of crackers for country and city trade; takes every city and country newspaper in the State; has paid in one month \$1,600 for advertising and printing; carpenter's bill has averaged \$9,000 during the last twelve months; printer's bill in same time, about \$3,000; has often fed 5,000 persons in one day; upholsterer's bill for the last twelve months has been about \$6,000; employs two draymen constantly; had an agent in New York to ship stores, until they got so low here that it was found to be cheaper to buy them in California. Last year consumed daily about one hundred and twenty-five dozen of eggs; sells about \$50 worth of oysters a day; manufactures 100 gallons of Winn's golden syrup per month—not furnished to any but private families. Receipts at both houses average \$57,000 per month, or a little short of \$2,000 per day; artesian well lately dug at the Fountain Head; has paid before \$200 per month for water; is selling confectionaries to go to all parts of the world, and occasionally packs a few boxes as specimens to New York and London; has sold as high as 6,000 pounds of buckwheat in a month, made into cakes; has paid one man in his employ for 17 months' services \$17,000 and board; receives less custom on Sundays than week days; bill for crockery and glassware for the last year, has been about \$10,000; consumed \$1,500 worth of coal in one month; has paid as high as \$3,000 for potatoes in one month. Ice bill in one month has amounted to \$2,000. All the above prices should be taken as the largest expenses in any one month; sometimes they have been two-thirds less—for instance: has paid \$5,000 per month for eggs, and as low as \$1,000—other articles the same. Paid last year for taxes and licenses, \$1,500.

"In addition to the above we are enabled to state that Mr. Winn has made very extensive donations for charitable purposes. Each day his expenses for feeding poor and hungry applicants in both of his establishments, amounts to \$20. His known kindness in these matters sends crowds to him, from whom he never asks a dime. He has paid away in the last year, independent of the above, \$7,000 for the support of ministers and churches."

In Salt Lake City a "party" was given at Social Hall on Tuesday, February 7, 1860. The invitations read as follows:

"Party At Social Hall. Mr. _____ and Ladies are respectfully invited to attend a Party at the Social Hall, on Tuesday, February 7, 1860. Tickets, \$10 per Couple. Mayor A. O. Smoot and Marshall J. C. Little, Managers. Committee of Arrangements: William C. Staines, H. B. Clawson, William Eddington, Robert T. Burton, John T. Caine, David Candland. Great Salt Lake City, February 1, 1860."

Where Wanton Fancy Leads—Rowe

According to Richard F. Burton, who attended: "The hall was tastefully and elegantly decorated; the affecting motto, 'Our Mountain Home,' conspicuously placed among hangings and evergreens, was highly effective. At 4 P. M. the Prophet entered, and 'order was called.' Ascending a kind of platform, with uplifted hands he blessed those present. He then descended to the boards and led off the first cotillon. At 8 P. M. supper was announced; covers for 250 persons had been laid by Mr. Candland, 'mine host' of 'The Globe'."

BILL OF FARE

FIRST COURSE

Soups

Oyster
Ox-tail

Vermicelli
Vegetable

SECOND COURSE

Meats

Roast:

Beef
Mutton
Mountain Mutton
Bear
Elk
Deer
Chickens
Ducks
Turkeys

Boiled:

Sugar-corned Beef
Mutton
Chickens
Ducks
Tripe
Turkey
Ham
Trout
Salmon

Stews and Fricassees

Oysters and Ox Tongues
Beaver Tails
Collard Head

Chickens

Turkeys

Ducks

Vegetables

Baked:
Potatoes Parsnips Beans
Hominy

Boiled:
Potatoes Parsnips Cauliflower
Cabbage (i. e. greens) Slaw

THIRD COURSE

Pastry:

Mince Pies
Green Apple Pie
Pineapple Pie
Quince Jelly Pie
Peach Jelly Pie
Currant Jelly Pie
Blancmange

Puddings:

Custards
Rice
English Plum
Apple Souffle
Mountain
Pioneer
Jellies

FOURTH COURSE

Cakes:
Pound
Sponge
Gipsy
Varieties

Fruits.
Raisins
Grapes
Apples
Snowballs

Candies

Tea

Coffee

Nuts

"After supper dancing was resumed with spirit, and in its intervals popular songs and duets were performed by the best musicians. The 'finest party of the season' ended as it began, with prayer and benediction, at 5 A. M.—thirteen successive mortal hours—it shows a solid power of enduring enjoyments."

Utah Welfare Associations

United States Smelting Refining and Mining Company

U. S. MINE WELFARE ASSOCIATION

The U. S. Mine Welfare Association at Bingham Canyon, Utah, authorized contributions and expenses as follows during November, 1931:

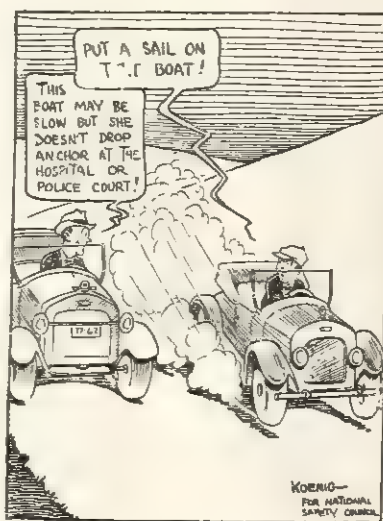
Gus Matson	\$ 50.00
Ambrose Martinez	50.00
Rudolph Carlson	25.00
J. J. Hall	50.00

\$175.00

Fredrick C. Coomber, 17 days, final

pay	17.00
Wilford Sisam, 30 days, final pay..	30.00
Cecil E. Cowdell, 18 days, part pay	18.00
Herman Newman, 28 days, part	
pay	28.00
Paul Gianopoulos, 12 days, final	
pay	12.00
Antony Krantz, 5 days, final pay....	5.00

\$276.00



LARK MINE EMPLOYEES' BENEFIT FUND

Balance, October 1, 1931..	\$387.50
Collections, October, 1931. . . .	25.25

\$412.75

Disbursements, October, 1931:	
Huddard Floral Co., flowers.....	5.45

Balance, October 31, 1931.....\$407.30

U. S. EMPLOYEES' BENEFIT FUND

The following claims were approved in November, 1931, at the Midvale plant:

Rade Masich, 8 days, final pay.....\$	8.00
George T. Clark, 12 days, final pay	12.00
Franklin Reading, 18 days, final	
pay	18.00
James Morrow, 9 days, final pay....	9.00
John Wheadon, 7 days, final pay,....	7.00
Mrs. Lozella Koehn, 16 days, final	
pay (Sick benefit to Matt Koehn)	16.00
Andrew Zarbas, 24 days, part pay....	7.00
C. D. Richards, 24 days, final pay..	24.00
A. W. Christopherson, 5 days, final	
pay	5.00
John Wheadon, 3 days, final pay.....	3.00
Andrew Zarbas, 14 days, part pay	14.00
Matt Trontel, 43 days, part pay.....	43.00

Probably What Andy Needed

A colored agent was summoned before the Insurance Commissioner:

"Don't you know," said the commissioner, "that you can't sell life insurance without a state license?"

"Boss," said the darkey, "you suah said a mouthful. I knowed I couldn't sell it, but I didn't know the reason."

Utah Railway Company Notes

Martin, Utah

A. J. KIRKHAM, Correspondent

During the past month much activity has been noted in and around the coal camps of Carbon County, much to the joy of the populace of this section. Forces at all camps have been increased to a very large extent and the movement of coal from this district indicates that, at least temporarily, the depression is lifting. Though far from the production and heavy movement of coal at this period of 1929, the increase over several months prior indicates that the unemployment situation is considerable better and means fewer idle men and better living conditions.

On account of the steady increase of business, the forces on the Utah Railway have been increased in virtually all departments in order to promptly and properly handle the business tendered. Four main line crews are handling the output very nicely by terminating their eastward trips at Martin, as the Away-from-Home-Terminal. Twenty-five trainmen and a similar number of engine men have been recalled to service within the past sixty days.

Mr. J. L. Dorsey of the Auditor's office, Chief Engineer Rathjens and Assistant Engineer Harmon of the Engineering Department were visitors in this district during the past month.

Operator C. D. Brown, who left our service during the spring of 1929 to accept employment in Alaska, returned to this district this fall and was re-employed as operator-clerk at Kingmine.

Now that the deer and pheasant hunting season is past, and I may state that employees availing themselves of these opportunities were well awarded, particularly Dispatcher Dyke, there is very little to be excited over until the return of the open season on trout; so everyone is keen to settle down to their respective jobs and keep the "Prosperity Flag" flying.

Conductor Alma Mourné received word on December 1 of the death of his mother at American Fork, Utah. Relief was promptly arranged for Mr. Bourne and he left for that point. Our sympathies are extended to the bereaved.

We experienced a very open fall and had but little stormy weather until near

Thanksgiving. There was, however, a light fall of snow in this district and the thermometer dropped to 10 degrees above zero for several nights. Trains have been handled promptly and with very little delay so far on account of weather conditions.

On account of storms in other localities of the north and west, empty cars being returned to this district have contained an excessive amount of snow and ice and much additional labor has been required to properly condition these cars for coal loading.

Our B & B force was increased on December 1 by three helpers to take care of some repair work on the Panther Bridge over which our company operates in order to serve the Panther mine.

Mr. Bert Haslett, traveling freight agent for the Western Pacific R. R. Company, was a caller at our offices during the past month.

Mrs. A. S. Wahl, wife of Machinist A. S. Wahl, left for Los Angeles, California, November 25 for an indefinite period.

This issue of the Ax-I-Dent-Ax will be the last issue of the year and through its columns your correspondent wishes to extend to the readers of it the Season's Greetings and with the advent of another year, let's hope that our Prosperity Flag will float high and as the year advances, the depression of the past year will lift, that our non-employment ranks will be replaced by employment for all and good cheer will predominate.

MISS F. V. HEMPSTEAD

We have the following from Miss Hempstead, Glendale, California, under date of October 28.

"Thanks for October Ax. A fine number."

We also are in receipt of the following under date of November 21:

"Enjoying November Ax—very fine. Turkey would taste good here, it is so cold. Had a visit from my brother, Dave, last week. Can walk real well. Best wishes to all for November 26 and December 25.

"F. V. HEMPSTEAD."

Engineering Department

MIDVALE COPPER SULPHATE BOX

By C. E. BARTLETT

Midvale Flotation Mill Metallurgist

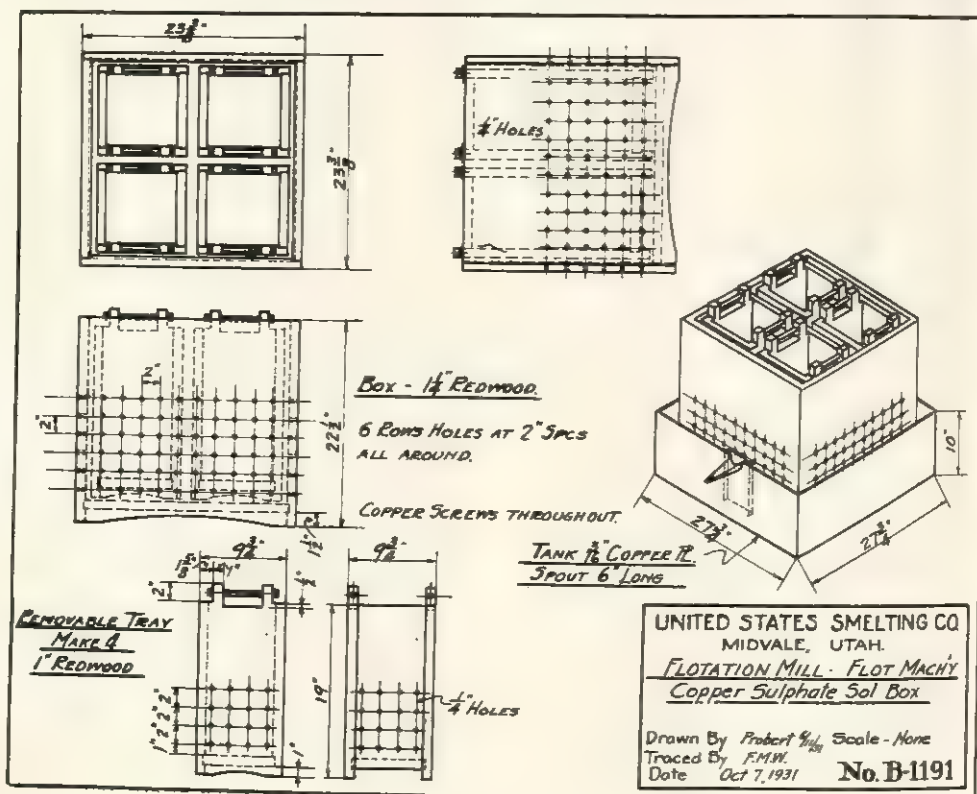
United States Smelting Refining and Mining Company

Copper sulphate is one of the most corrosive reagents used in flotation and therefore requires a different method of handling than that used on other reagents. Because of its lower position in the electromotive force series of metals, copper in solution will replace the metallic iron of the pipes or tanks. This action makes it impossible to use iron mixing tanks and feed the solution in feeders, made of iron, as is the practice with our other reagents.

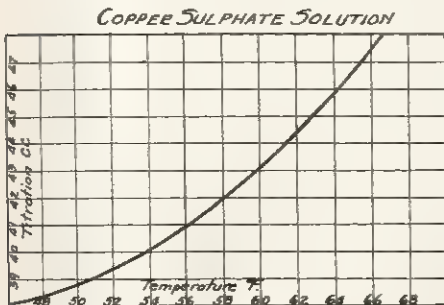
The accompanying sketch shows the type of box used at Midvale. It consists of four small wooden boxes which fit in a larger box, also made of wood. This larger box is placed inside a square tank made of metallic copper which does not corrode or warp. The four small boxes are filled with copper sulphate crystals. A given volume of water, per minute, is

fed to the four boxes by means of a Geary reagent feeder and a suitable pipe line. The water runs through the crystals in the wooden boxes and is caught in the copper tank which acts as a reservoir and allows more time of contact between the crystals and the water. It also provides a means of maintaining a steady overflow of constant strength copper sulphate solution which drops directly into the pulp. With a flow of water around 600 c. c. per minute the resulting solution is nearly saturated.

Obviously the amount of copper sulphate added to the pulp depends on the rate of fresh water flow to the box and the rate of solution of the salt. Rate of solution depends primarily on temperature, but also the amount of insoluble material which prevents proper contact of



the water with the copper sulphate. The rate of fresh water flow can be regulated by proper adjustment of the Geary feeder but no attempt at temperature control is made. The difference in solution strength, caused by temperature changes, can be overcome by volume of water changes. The graph shows the relation between temperature and solution strength for this type box when 600 c. c. per minute, fresh water is fed to it. In actual operation, solutions are run for copper every week.



This serves as a check against "dirty boxes" as well as a temperature check. Incidentally the boxes must be cleaned every six weeks.

The present box is a modification of the one used in the old Pilot Mill. Each member of the mill staff since that time has made some improvement in its operation. This box is easily built, can be closely controlled and is easy to clean.

FOUR MEN

It chanced upon a winter's night,
Safe sheltered from the weather,
The board was spread for only one,
Yet four men dined together.

There sat the man I meant to be
In glory spurred and booted,
And close beside him to the right
The man I am reputed.

The man I think myself to be,
A seat was occupying
Hard by the man I really am,
Who to hold his own was trying.

And, though beneath one roof we met,
None called his fellow brother;
No sign of recognition passed—
They knew not one another!

East Chicago Notes

E. C. SPENCER, Correspondent

The boys around the plant are preparing for the cold weather by filling their radiators with anti-freeze and taking their red flannels out of storage.

The Ford truck seems to need a little aid. At least it could stand an extra heavy spring, as the truck driver, Cloy Kerr, has gained about thirty pounds in weight during the last few months.

Frank White, clerk at the Acid Plant, attended a party at Westville, Indiana, in honor of his mother's 83rd birthday.

Jesse Sloss was limping around for a few days; the boys were wondering what the reason was. Jesse says that old age hasn't bothered him yet, it was caused from trying to reroof his home in record breaking time.

Evelyn Kerr says she can hardly wait for Christmas, because she still believes in Santa Claus. Believe it or not, it's true.

Louis Balint, clerk, has joined the wrestling profession. The other evening he offered to wrestle anyone in the room for \$5.00. Here is some keen competition.

The new baghouse flue is now completed. The Engineering Department and everybody else is satisfied and proud of the job.

Besides excelling in the art of horseshoe pitching, a number of our younger employees are very interested in bowling.

Al Schuler, a staunch Northwestern supporter, almost had heart failure during the first quarter of the game between the Wildcats and Gophers played at Dyche Stadium, in Evanston, Illinois.

Those who profit by safety are the ones who believe and work safely.

"PLEASE DON'T DISTURB"

A man went into a small country store. The only man in sight, presumably the proprietor, was enjoying his ease at the back of the shop, chair tilted back and feet on the counter, and made no move to come forward.

The prospective customer waited a few minutes and then called: "Can't you serve me? I am in a hurry to get home."

The proprietor shifted his position slightly and drawled: "Couldn't you come in some time when I'm standing up?"

AX - I - DENT - AX

SAFETY FIRST

EDGAR M. LEDYARD, EDITOR
VIRGINIA BAKER, ASSISTANT EDITOR

CORRESPONDENTS

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FAIRBANKS, ALASKA	O. J. EGLESTON
FIERRO, N. M.	D. C. BEYER
HIAWATHA	J. G. REESE
KINGMINE	A. OPPERMAN
LARK	DORUS A. THOMAS
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SALT LAKE CITY OFFICE	W. W. RAGER
SEATTLE	R. R. RUSSELL
SUNNYSIDE	J. T. FRANKS

PUBLISHED ONCE A MONTH FOR THE
EMPLOYEES OF THE UNITED STATES SMELT-
ING, REFINING AND MINING COMPANY AND
SUBSIDIARIES. IN THE INTEREST OF SAFE-
TY, WELFARE AND TECHNOLOGY.

Salt Lake City, Utah, December, 1931

RETROSPECTION

Ordinary illumination does not disclose individuals in their true light. It requires a depression, a crisis, an emergency or a tragedy to reveal people as they are. Neither does a small picture give the proper perspective.

A former captain and fullback of a state university sues his father for the cost of his education while in school. An incident.

Fannie Hurst, one of the most popular writers and reputed to be the highest paid one among women in America, takes a good kick at the young folks in one of her recent articles. She says that the "wise-cracking, smart-alec, irreverent, un-intellectual, impudent youngsters between fifteen and twenty who clutter up the American scene are more than just bores" and that "gin, speed, necking, shirking, patronizing, wise-cracking are requirements for good standing." Quite an indictment.

To offset this, however, we have the satisfaction of knowing that twenty-five per cent of all college students are "working their way" through and about an equal number are assisting themselves partly in school.

We have the example of the Colorado boy who saved several of his schoolmates from freezing. Earnings of hundreds of thousands of newsboys go to support families; a multitude more perform useful services in the home and in the com-

munity. The "choring" days are about over in many parts of the United States. If there was anything outside of school for boys and girls to do, they might perform tasks as well as ever.

A study of the chart in the center of this number indicates that we have had our "ups and downs" in business for 140 years; the same conditions will undoubtedly be reflected in the following 140 years. And the whole story of success can be written in five words: "The survival of the fittest."

The graph shows the "trend of business" and "wholesale prices," but not the higher standards of living to which the people of the United States have become accustomed. Failure of the newspaper and a bottle of milk to arrive on time means "annoyance" and "discomfort" to millions of homes in the United States. It is hard to decide what to eat for breakfast and the determination of whether a chicken, duck, turkey, pork or beef roast shall be the piece de resistance at Christmas brings "mental anguish" to many. It must be so for there are over forty million people working in the United States and most of the families have jaded appetites.

It is true that some are less fortunate, also consoling to know that special committees, chambers of commerce, service clubs, religious organizations and various other benevolent groups are giving freely of time and money to relieve hunger, cold and suffering.

Real inspiration comes from the fact that capital and labor, in these days when the stress of depression discloses men as they are, are generally working together to solve their problems.

It requires more than a study of charts and time spent in retrospection to carry on. Faith is necessary for "in the past, it has been the one great and lasting source and justification of the quality of compassion in men. And it has done far more than anything else to assure the continuing dignity of human life."

The many employees of the United States Smelting Refining and Mining Company, in particular, have reason to be thankful for a job, something to do and freedom from the worry of unemployment which gives hope and courage to face the future. Future problems can be solved, just as those in the past have been met through the sustained effort and cooperation of officers, officials and employees.

Notes from Nome, Alaska

JOHN TREICHLER, Correspondent

It is hard to realize that winter has set in, in this part of Alaska. On October 16, thirteen inches of snow fell, along with a high wind. The roads leading to the various operating units became completely blocked and the Alaska Road Commission was kept busy opening them up for traffic.

Today, October 25, another blizzard is in progress; every effort has been made to keep the dredges running, but more of this sort of weather and zero temperature will soon shut them down.

The last southbound vessel of the Alaska Steamship Company left Nome Friday night with 230 passengers, one-half million in gold bullion, reindeer and furs. Arctic Transportation Company boats, Baldwin and Silver Wave, will leave today, October 25, which will close navigation for nineteen hundred thirty-one.



Left: N. W. Rice; right, J. D. Harlan and family. Easter, 1931.

The Kongarock Transportation system got snowed in. Their last train was stalled somewhere between an unknown place and nowhere. The Henry Creek Dredge crew of thirteen had to be rescued by airplane and brought to Nome to make the last boat.

Many of our old employes left for the States; among the most notable is Jim, our bunk house janitor. He has saved ten thousand dollars and is going back to enjoy life in Greece.

Among the most noted recent social activities in Nome was a luncheon given by

Mrs. Hartford and Mrs. Hellerich in honor of Mrs. Harlan who, with Mr. Harlan, is here in Nome for a short visit.

On October 24, a luncheon was given by Mrs. Harry Lomen in honor of Mrs. Judge Lomen who is leaving on the Baldwin for the States to visit her old home in Michigan, where she will have a chance to display her new fur coat.

In the near future a luncheon will be given by Mrs. J. Stangroom to introduce her daughter to the Nome Bridge Club. The daughter is a new arrival in Nome.

Our Mr. J. D. Harlan and Mrs. Harlan expect to leave for Fairbanks by plane about November 1, after paying us a short but pleasant visit in Nome. Our attorney, Mr. O. D. Cochran will also be an outgoing passenger about that time.

We extend to you all the compliments of the season.

THE LAW OF AVERAGES

The following examples are typical:

"That boy babies born in Kansas live seven years longer than boy babies born in New York.

"That only one man in every 100 bonded by surety companies will go wrong this year; and of each 70 that do get in trouble, only one will have deliberate criminal intent.

"That for every man hurt next year by falling off a stepladder, $1\frac{1}{2}$ men will be hurt getting into bed, and three climbing in and out of the bathtub.

"More men fall in love with women's eyes than with any other feature. Hair comes next, teeth next, feet last.

"That the average automobile operator in Boston injures a person every five years, while the average driver on Cape Cod drives 40 years before he injures a person.

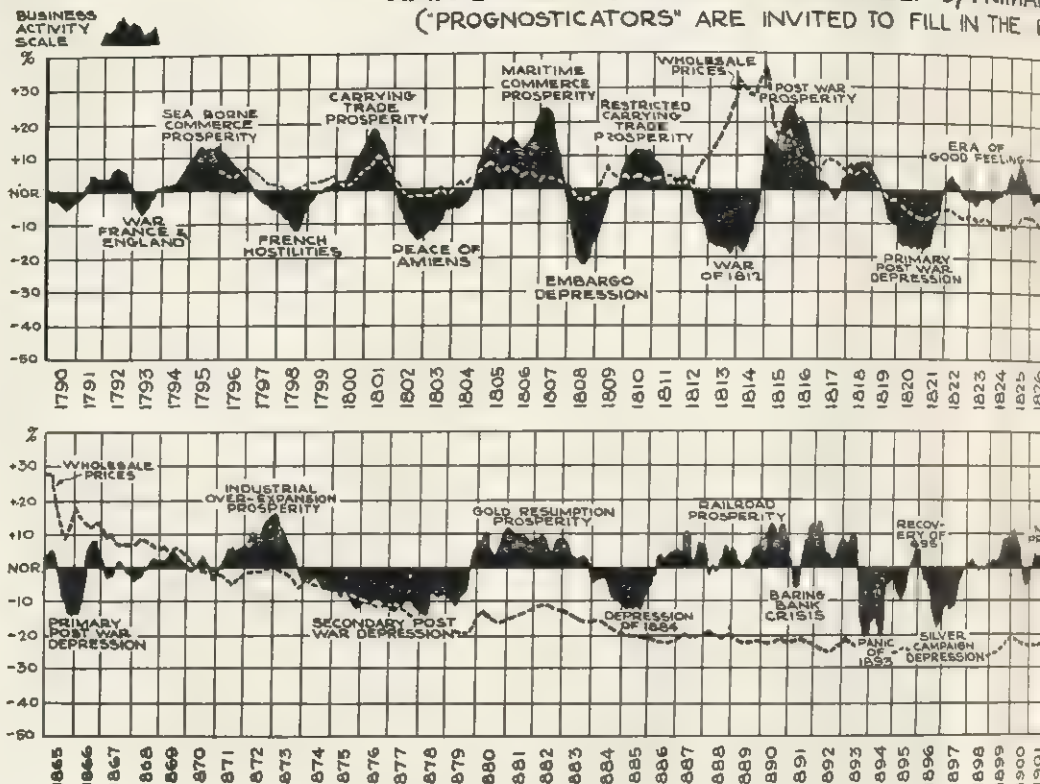
"That one automobile fatality out of every two in the United States is a pedestrian.

"That in the United States approximately five industrial workers in each 100 will lose time on account of accidents during the coming year.

"That in the United States, employes between the ages of 20 and 25 have twice as many accidents per 100 workers as employes over 45 years of age."

Rise and Fall of American Business Activity

~ WAR BOOMS FOLLOWED INVARIABLY by PRIMA
("PROGNOSTICATORS" ARE INVITED TO FILL IN THE



Compiled under the direction of Col. Leonard P. Ayres, vice-president of the Cleveland Trust Company of Cleveland, Ohio, and recently reproduced in the Los Angeles Times, the comprehensive record above portrays the swings of American business activity from prosperity to depression over the last 142 years.

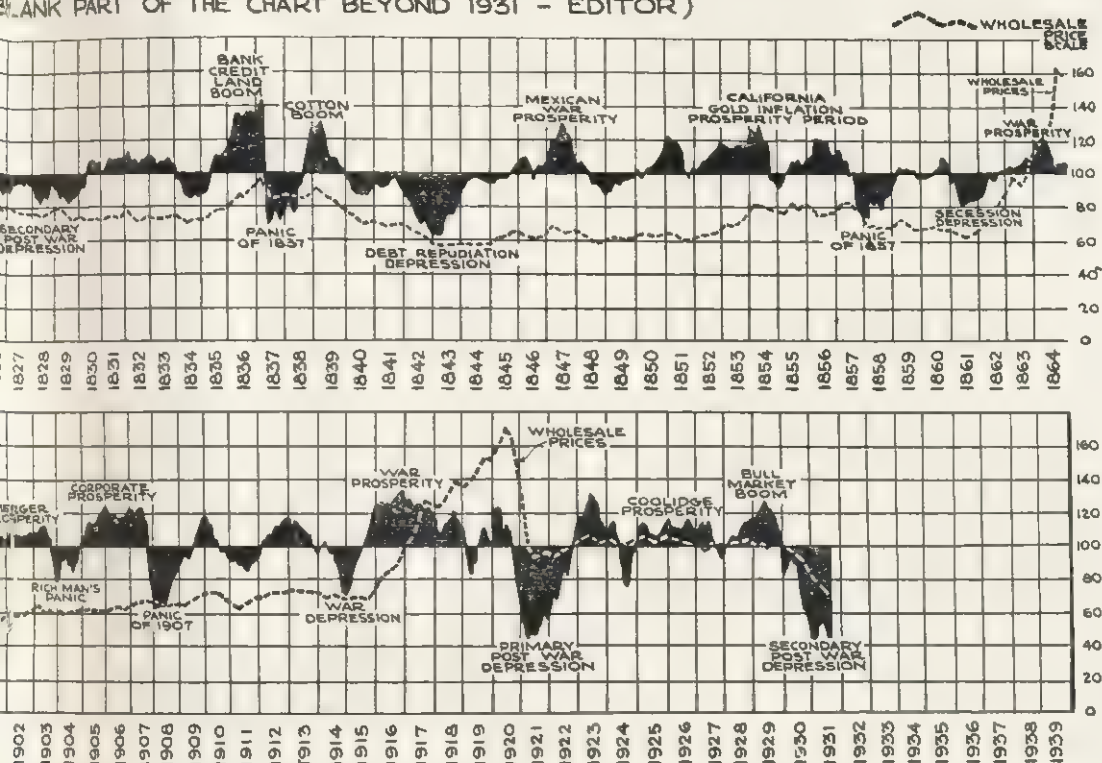
The light dashed line running through the diagram represents the course of wholesale prices, if the average for 1929 is taken as equal to 100. It shows that three times during the past century and a half the level of wholesale prices of commodities has been more than twice as high as it is now. The first time was during the War of 1812, the second one during the Civil War, and the third was during the World War. In the '40s and in the '90s, the prices were much lower than they are now.

During this long span of years there have been twenty well-defined periods of serious depression, of which the present one is the most severe. In January and in July of 1931 business activity dropped to 28 per cent below normal. The next lowest record is that of the depression of 1921, which reached a low point of 27 per cent below normal.

Since 1790 Pictured in Statistical Record

RY and SECONDARY CORRECTIVE DEPRESSIONS ~

(BLANK PART OF THE CHART BEYOND 1931 - EDITOR)



On only one previous occasion has business activity dropped more than 20 per cent below the normal level, and that was in 1808, during the embargo depression, when it fell to 22 per cent below. The two longest depressions came in the '40s and in the '70s, and each one lasted nearly six years. It is noteworthy that each one of our three great wars has been followed by a primary post-war depression, and then after a prosperous period, by a secondary post-war depression.

This piece of economic and statistical research carries the detailed records of American business cycles back almost to the beginning of Washington's first term as President. In the earliest years of the period business activity was predominantly the activity of commerce, and even of sea-borne commerce.

In the middle years of the last century this importance diminished and that of agriculture and industry increased. In this century the diagram reflects the changes in industrial production.

Report of First Aid Work, Fairbanks Exploration Company—1931

By CHARLES O. FOWLER, Superintendent of Distribution

Mr. Geo. H. Miller, foreman miner, U. S. Bureau of Mines, was with us from July 5 to August 19, at which time he conducted classes in First Aid to the injured at the following camps: Dome, July 8 to 10, inclusive; Goldstream, July 13 to 18, inclusive; Fox, July 19 to 25, inclusive; Gilmore, July 26 to 30, inclusive; Chatanika, July 31 to August 3, inclusive; Cleary, August 4 to 9, inclusive.

On the evening of July 12, prior to the classes held on the Goldstream side, we had a meeting at the Fox Camp for the foremen and dredgemasters, at which time we explained the work and also the results we were hoping to accomplish. We tried to impress on the men that they were so situated that with their help we could finish this work with good results and especially asked for their support and cooperation. We also told them that we expected them to take the work, showing their men that they were personally interested. This in itself would help more than anything else in getting good attendance from their departments. Mr. Miller discussed accident prevention thoroughly. I called particular attention to the nature and causes of accidents that are most common and especially asked that any unsafe condition or faulty tools be changed so that we could, if possible, reduce the number of accidents. We had a general discussion in which we received many excellent suggestions and I believe much good was accomplished. A delicious luncheon was served and all enjoyed a pleasant and instructive evening. All foremen and dredgemasters from the Goldstream side attended this meeting with the exception of Mr. McPherson, stripping foreman at Sec. 2-G.

A similar meeting was held at Chatanika on the evening of July 30 for the dredgemasters and foremen from the Cleary side, in which the results were similar to those at Goldstream. All foremen and dredgemasters attended with the exception of Mr. McClellan, dredgemaster at Dredge No. 5.

The percentage of men who completed the first aid course and received certificates is as follows: Dome, 84.21%; Goldstream, 81.06%; Fox, 36.14%; Gilmore,

66.32%; Chatanika, 66.17%; Cleary, 60.22%.

In addition to the classes held at night, classes were held immediately after breakfast so that any employes who were working on the night shifts would have an opportunity to take the work.

At the conclusion of instructions at each camp, we explained that a contest would be held later and asked that any who were interested and would care to participate in the contest give us their names. On August 19, we held the contest at the Fox camp, in which one team from each of the following camps competed for the championship, with the following results:

First place, Chatanika	99.67
Second place, Cleary.....	99.40
Third place, Goldstream.....	99.27
Fourth place, Gilmore.....	98.67
Fifth place, Fox.....	98.07

Nearly two hundred guests witnessed this contest and all were surprised to see the work carried on by contestants with so much carefulness, correctness, neatness and rapidity. These results were possible only through much study and practice by the team members and by Mr. Miller's personal help. Each member of the winning team was presented with a beautiful gold charm prize, made from Alaska gold especially for this contest.

Mr. Miller worked hard while conducting the classes and never relaxed his vigilance while coaching the different teams. We were indeed fortunate in having a man of his ability, training and personality to carry on this work.

We had better attendance at the classes this year than in former years as the following will show: 1928, 129 certificates were issued; 1930, 214 certificates were issued; 1931, 293 certificates were issued. Of the above summary, 413 men have taken the competitive test once; 90 men have taken it twice; and 11 men have taken it three times.

We have had very good results and this is due to a great extent to the help that was received from the different foremen and dredgemasters.

During the classes we talked safety first and asked for suggestions that any-

one had to offer. We received several and in turn mentioned them to the men in immediate charge of the work.

In furtherance of safety first, I believe a safety committee consisting of not less than five members should be appointed to consider any and all suggestions that may be offered. Their recommendations should be made only after careful investigation and if conditions warrant same, action should be taken. They should also study accident reports, familiarize themselves with the cause of all accidents and then recommend any changes needed, which may eliminate further accidents from the same cause.

I believe the following would be an excellent committee, as it would consist of men of the different departments and it would help a great deal in getting them to take a personal interest in this work, and it might help towards getting conditions changed in their immediate work: R. B. Earling, Chas. Dustin, J. E. Hopkins, W. H. S. McFarland, R. M. Ogburn.

A safety inspector should be named who will have authority to point out any infractions of recognized safety rules to offending foremen and work in conjunction with the safety committee.

I further recommend that next season we purchase and supply our first aid kits with triangular bandages, compress bandages and picric acid gauze, similar to those used by the U. S. Bureau of Mines in their work.

I want to thank all for the help and cooperation that was received during our recent contest and I look forward for more interest in this work during the coming year.

COAL CAUSES CONCERN

The ten-ton lump of coal in the state capitol building is causing some concern. It has occupied a place of honor near the west door of the building for nearly ten years, but with the remodeling of that part of the lower floor the coal is more or less in the way. The problem is to move it.

The coal is in one piece, 5 feet by 5 feet by 10 feet, and weighs 20,900 pounds. It was mined at the Black Hawk mine of the United States Fuel Company. Company engineers are seeking to find methods of moving the block without breaking it.—Salt Lake Telegram.

CORRESPONDENTS AND CONTRIBUTORS, HERE'S YOUR MERRY CHRISTMAS

(One among dozens of unsolicited "testimonials.")

November 19, 1931.

Mr. Edgar M. Ledyard,
Editor, Ax-I-Dent-Ax,
Salt Lake City, Utah.

Dear Mr. Ledyard:

When I was in Mr. G. S. Clevenger's office yesterday he called my attention to the September issue of Ax-I-Dent-Ax and asked me if I saw it regularly. I replied that I was on the mailing list some years ago and always enjoyed the magazine very much but that my understanding had been that it had ceased publication long ago, since it stopped coming to me.

I hardly recognized the present magazine as it was so different and so much better than the old sheet. I understood from Mr. Clevenger that in its present form it is sent out gratuitously to professional people who are interested in it, although it is designed primarily for circulation among your own employees. If this is the case I hope that you will be willing to put my name on your mailing list. It seems to me that you have a splendid combination of technical information, historical data, news items and humor. Even your news items are of interest to me because of my acquaintanceship with some staff members who have at times been connected with the Boston office, but who are now scattered among your various operating districts.

Yours sincerely,

CHARLES E. LOCKE.

(Mr. Locke is Professor of Mining Engineering and Ore Dressing, Massachusetts Institute of Technology, Cambridge, Mass. —Editor.)

GREETINGS FROM ALASKA

Editor and Contributors to
the Ax-I-Dent-Ax:

Your Alaska readers take this opportunity of telling you how much we have enjoyed the magazine during the past year. We extend the Season's Greetings and wish for all of you a pleasant and prosperous 1932. Each number is looked forward to with increased interest.

O. J. EGLESTON.

Items, Literature and Personals

SMELTING COMPANY POSITION STRONG

BOSTON—U. S. Smelting Refining and Mining company, the world's largest primary producer of silver and a producer of over 300,000 ounces of gold per annum—the output was 322,968 ounces in 1930—continues producing something over 25,000,000 ounces of silver per annum from its own mines, about 20,000,000 ounces of which come from its Mexican properties.

For the first 10 months of this year United States Smelting has averaged something over 28 cents an ounce for silver sold, while currently the market is 33 cents. To the United States Smelting company a rise of 1 cent an ounce applied to a year's output is a matter of \$250,000 additional profits, or almost 50 cents a share on the common stock.

For the eight months of this year to September 30 in the face of distressingly low prices for lead, zinc and silver, and after charging against gross earnings \$1,425,552 for reserves, the company earned 10 cents a share on the common stock. It is now in the best earning months of the year, so that there is no reason to believe that the full \$1 dividend now being paid on the common will not be fully earned.

The management has further fortified the company's capital position by taking advantage of the very low quotations at which the common stock has sold this year by buying in the open market for company account something over 13,000 shares of the common stock. This, together with the 56,700 shares similarly purchased in 1930 at an average cost of \$21.06 per share, has reduced the common stock outstanding today to approximately 550,000 shares.—Boston News Bureau, November 10, 1931.

THE CENSUS OF MINES

The place of mines in our industrial family has often been a subject for these columns. We have believed implicitly in the mines as a great national asset, and as second only to agriculture as a source of revenue, employment and dividends. The census report on the mining industry confirms our statements, and gives an imposing analysis. We have 10,135 companies, operating 11,602 mines and quarries; we employ 806,043 wage earners, at

an annual pay roll of \$1,083,640,059, and we spend for supplies and the like, \$413,246,896. These figures, of course, apply to the year 1929. The value of our product was \$2,392,650,689, of which coal represents 56.5 per cent; metals 26.2 per cent.

In this survey mining takes second place to none. It is the backbone of our country, and its protection, stimulation, and encouragement is one of the greatest needs. Protective tariffs, just taxation, sound laws, proper labor relations, are only a few things that should have sympathetic cooperation. Mining is well worth protection as a national asset.

—The Mining Congress Journal, September, 1931.

WOLFIN HEADS UTAH MINE STATION

The appointment of Hugh M. Wolfin, of Los Angeles, Calif., as supervising engineer of the Intermountain Experiment Station of the United States Bureau of Mines, Salt Lake City, Utah, is announced by Scott Turner, director of the bureau. Mr. Wolfin will immediately assume his duties, and it is believed that his appointment is logically the first step in carrying out the bureau's plans for increasing the general usefulness of the Intermountain station.

At the Intermountain station, research is being conducted in metallurgy, health and safety of miners is being promoted, economic and statistical studies are being made, and mining investigations are under way.

"One of the bureau's most important mine-safety stations," said Mr. Turner, "is at Salt Lake City. The activities of mine-safety car No. 9 are now directed from this station, and the bureau's safety activities in Utah, Idaho, Montana, eastern Nevada and western Wyoming are centered here.

"Under the new plan, the Salt Lake station will be headquarters of 23 employees of the Bureau of Mines, and nearly \$100,000 will be expended each year in the conduct of the federal mining activities grouped at this station. It is believed that the proposed reorganization of the station's work will result in greater benefits to the people of Utah and nearby states." —The Mining Congress Journal, September, 1931.

From Various Sources

SAFETY TUITION IN UNIVERSITIES

It is the purpose of the Industrial Accident Commission to recommend to university authorities that training in safety be given students in the engineering courses. This thought has been advanced more than once, but it is hoped to present it in concrete form and show in a convincing way the values that will follow.

An engineer who has graduated and is about to follow his profession is lacking if he does not properly place human life in its relation to the machine. This means he must know the latest in protective devices, that needless risks should not be allowed, that he must consider the life of each man under his direction as he would his own, and, further, that studies in fatigue, monotony, and the various other accident causes, will pay the right dividends and add cubits to the engineering stature.

With this kind of leadership, trained and alert, there will follow intensive interest in life protection. The man at the top has real responsibilities.—California Safety News.

LARGE GROUP OF SOVIET STUDENTS ARRIVES

On September 21, fifty-three engineering and technical students arrived from the Soviet Union to study at various American universities. This is the first large group of Soviet students to be sent to this country. The greatest number, twenty-two, will enter the Massachusetts Institute of Technology, nine will matriculate at Cornell University, six at Harvard, six at Purdue, five at the University of Wisconsin, three at the Colorado School of Mines, and one each at the Carnegie Institute of Technology and Lehigh University.

All of the recent arrivals are advanced engineering students who have had higher technical education in the U. S. S. R. and in most cases several years of practical experience. They were selected by the educational authorities and by the industries on the basis of high standing and general qualifications. Among the specialties followed by them are machine-building, railroad construction, electrical engineering, bridge construction, ship-building, etc. Their transportation, tuition and living expenses are paid by the organizations sending them.—Economic Review of the Soviet Union, October 15, 1931.

W. D. BRENNAN PASSES

William David Brennan, president and general manager of the Utah Fuel Company, well-known in western mining circles, died from heart failure on a train near Denver, Sunday, November 1, at the age of fifty-two.

Mr. Brennan was born in Malone, New York, and graduated from the Sheffield School of Applied Science at Yale with a B. S. degree in 1900. His first employment was with the Union Pacific Coal Company at Cumberland, Wyoming, in 1901, where he rose from a subordinate position to general superintendent.

In 1920 he became manager of the Phelps Dodge Corporation in Dawson, New Mexico, which position he retained until he succeeded Theodore C. Keller as head of the Utah Fuel Company, January 1, 1930. He was the author of numerous technical magazine articles on coal mining and safety work, an active member of the American Mining Congress and highly esteemed by his associates.

Funeral services were conducted on Wednesday, November 4; entombment was in the Salt Lake Memorial mausoleum.

BINGHAM MINE CONTROL CHANGES

Announcement was made Thursday that the United States Smelting Refining and Mining Company and the Utah Copper Company have acquired joint ownership of the Bingham Bemis mining property at Bingham.

The smelting company, under the terms of the deal, acquires the underground rights and the Utah Copper Company takes over the surface rights. The property consists of 240 acres of patented claims near the mouth of the canyon.

George L. Bemis, veteran mining man, held the bulk of the company's stock. Approximately 1000 feet of tunnel work has been done by leasers at the mine. During the early days approximately \$55,000 of silver-lead ore was produced from the mine. The property has been developed only on the upper levels.

It is believed that more favorable limestone beds are located below the present workings. While no announcement has been made by the United States company, it is believed that the Bemis will be worked from the Lark mine through the Mascot tunnel.—Salt Lake Tribune, November 20, 1931.

Retrospection

By MARCUS E. JONES

Marcus E. Jones, familiarly known in Salt Lake City as Professor Jones, was born in Jefferson, Ashtabula County, Ohio, April 25, 1852, of old Yankee stock; his ancestors came to America on the second ship after the Mayflower. Professor Jones graduated from Iowa College, established 1846, (now Grinnell College) at Grinnell, Iowa, with the degree of Bachelor of Arts, in 1875. After three years post graduate work, the degree of Master of Arts was conferred upon him in 1878. He wears a Phi Beta Kappa pin awarded by the Grinnell College chapter. In Salt Lake City he is known as a geologist, botanist and smelter smoke expert, although botany has been his avocation and vocation for sixty years. For upwards of twenty years he recorded the water levels of Great Salt Lake for the Smithsonian Institution. He worked out theories on precipitation and engaged in discussions with the United States Weather Bureau, published many papers and delved into various phases of scientific investigation. In 1923 he moved his collection of 500,000 plant specimens from Salt Lake City to Pomona College. Since that date he has added some 20,000 specimens to the collection, mostly Mexican material. He spends about six months in the field every year and during other months plays tennis to keep in form. At

present he is Honorary Curator of the Pomona College Herbarium at Claremont, California, and is apparently as hale and hearty as ever. Professor Jones has probably collected more plants than any other man living in the West today.

In my opinion, Professor Jones is correct in giving the United States Smelting

Refining and Mining Company credit for furnishing the solution for the alleged smelter smoke problem which enabled smelters to continue in Salt Lake valley. Mr. C. B. Sprague, formerly chemist for this company, was the first man to adapt the bag house to a lead-silver plant—that of the United States company at Midvale.

The A. S. & R. adopted it at Murray, Utah, and these two plants continued operations in Salt Lake valley. Soon after, the bag house was adapted to the Mammoth Copper Company copper plant of the United States company at Kennett, California; this was the only copper plant which continued in the Shasta Copper Belt. For the inauguration

of both scientific and practical investigations of the smelter smoke problem, Mr. George W. Heintz, formerly vice president and general manager of the United States Smelting Refining and Mining Company, is, in my opinion, entitled to more credit than any other smelting company official.—Editor.



Photo by Ledyard, Nov. 16, '31

Marcus E. Jones

I had probably better begin with what I consider the most important events that ever happened in American history, both of which occurred on April 14, 1865. On that date my father started to move from my birthplace, Jefferson, Ashtabula County, Ohio, to Grinnell, Iowa. He took my older brother and myself with him on the freight train on which he shipped two carloads of horses; we rode in the caboose. The next

morning at daybreak, we found our train side-tracked waiting for the passage of another train. We walked along the tracks to the front of the train where we found the passing engine draped in black. The engineer said it was out of respect for Lincoln who had been assassinated the previous evening, April 14. In those days, patriotism was a religion. We boys absorbed my father's patriotism and it seemed to us that the bottom of the world had dropped off when Lincoln was killed.

Grinnell at that time was the terminus of the Rock Island Railroad, also a depot for transcontinental transportation. The great six, eight and ten-horse freight teams that used to transport freight were outfitted at Grinnell and drove on across the Great Plains to their destination. At Grinnell I saw many picturesque men in those days. I remember one, a long-haired fellow dressed in buckskin clothes with a beaver fur cap and Indian scalps dangling at his belt, carrying a six-shooter and cartridge belt strapped ostentatiously about him; he was the center of attraction.

The year before I was born, my father had gone out to Grinnell with my grandfather Burton and bought a half section of land near Grinnell. My grandfather Burton (father of Theodore E. Burton, author and statesman of Ohio) was a minister, my mother was his oldest daughter; she was brought up in the strictest of the old Puritan ways. My father and mother had discussed very fully their responsibility toward their children. Instead of bringing them up in the decidedly "un-Christian atmosphere" of Jefferson, they decided that it was best for the family to move to some place where the moral influences were such that they could bring up their children in the way they thought they should grow; there was a religious motive in going to Grinnell. Grinnell had been started as a New England colony with prohibition enforcement from the start. The moral atmosphere of Grinnell was always very high.

Father went out onto the prairie and built a one-room shack large enough to hold a family of six or eight children. When it was finished we moved out and father started to turn up the pristine sod of the prairie with a four-horse team. Every morning just before sunrise thousands of prairie chickens would come from nowhere and light on the sod and have their morning seance, which apparently was a wholesale love affair. The roosters, about the size of "ordinary roosters," would get on the highest points of the sod, swell out their chests, stretch out their wings and drum either on the sod or on their own legs with their wings and make a long curious noise; then swell out the pouches on each side of their necks and strut. More than likely two or more roosters would be making love to the same hen at the same time. Whenever this happened they would start fighting and jump up and down just as our roosters fight. You would see forty or fifty of those fights going on on the sod; the hens were very demure and would merely watch the fight. The successful rooster would then go off with the hen. This circus began every morning at about the same time and continued for a half hour or an hour until the sun came up. Then at some signal the whole crowd would rise up in the air, fly off and we would not see them until the next morning.

After several acres were plowed, my father set my older brother and myself to work planting sod corn. Once in awhile he would have us put in a pumpkin seed or a squash seed. The prairie had scattered over it some small bushes called red root, the botanical name of which is *ceanothus*; there was another shrub called the prairie willow. The roots of the shrub were very hard and when the plow would come up against those roots, the team would always be stalled and have to make several attempts before they could pull the plow through the obstruction. The prairie grass was about one foot high and very dense and would support hundreds of stock. If our horses were turned out to pasture all summer they would keep in first class physical condition. As fall came on, it was necessary to make hay to feed our stock through the severe winter. Father bought a mowing machine and went out any place on the prairie and cut about a hundred tons of prairie hay.

In the following spring my father built a better home and the children were sent to school. There was no district school in that country except one held in a farmhouse a mile away; the farmer's wife had been elected school teacher. We had to walk a mile across the prairie to the farmhouse to school and back again at night. When the temperature was way below zero, it was a very trying experience, but the children had to go. When it was too cold for us to walk, father would take us in a sleigh. In that

school I learned arithmetic, grammar, history, spelling, reading, writing and geography. In those days, it was a great fad to be able to spell and every Friday afternoon was spent in a spelling match. Then every few weeks distant schools would get together and have a contest in spelling, choosing sides and trying to spell each other down. My sister, who was four years younger than I, became my most dangerous opponent. We were always the last ones up at every spelling match in that part of the state. I began to get afraid that some time she would spell me down, which I would not have enjoyed. So I suggested to her one day that it wasn't wise for us to keep spelling against each other for a half hour or so after everyone else was down; it would be better for us to refuse to spell against each other until one or the other was spelled down as it would be tiresome for people to listen. She agreed to it as she was equally afraid of being spelled down by me. It was a mutual proposition; from that time on we never spelled against each other very long.

The studies that I detested most were grammar and arithmetic. The studies I absorbed naturally were geography, spelling and reading. I didn't care much for history and I was so poor in arithmetic that it took me at least a year to learn the multiplication table and I remember distinctly that long after I took common fractions I had to keep my finger on the place where the multiplication table was so that I could see how much 8 times 9 was, etc.

It had always been a dream of my mother's life to send us children to college. Iowa College, a Congregational denominational school of high order which at that time had three or four hundred students, had been started at Grinnell, Iowa, in 1846, the year before the Mormons crossed the plains. My father sent me there for both preparatory work and collegiate work. In those days, in Iowa, it was either the common district school or the college with its preparatory department—high schools were unknown there.

The fall I started I had to take Latin as a part of the preparatory course. I studied until the following spring and then father had to take me out to help raise the crops on the farm, so I didn't finish the year. The following fall I had to go back and as Latin was only started in the fall I had to take it over again. As I look back on it now, I consider that a very important event because I had as my teacher the principal of the academy who was a graduate of Harvard College, and who had learned Latin at the greatest educational institution in the country. He used to tell us that as a student he was not allowed to bring his class book or any other book into the class room at recitation time, but had to learn the lesson by heart, translate it by heart, parse every word, give the construction of everything, the derivation of every word and answer every other question that could possibly be raised about the lesson by memory only. He didn't treat us that way—he allowed us to have our Latin readers with us and our Latin grammars, but we were never allowed to consult our Latin grammars during class work. In two years' time he made us so proficient that there wasn't a rule or exception of any kind in the grammar that we could not repeat off-hand and apply. It was a marvelous piece of work. The methods that he taught us, or which we really absorbed from him, were the basis of the scientific activity of my whole life. I did not know then what I was getting but his system of education in Latin was to go down to bedrock, never let a stone remain unturned and find out the bottom facts; to be equipped to answer any question that may arise and analyze any construction that may come up. We became so proficient that we could read Latin almost as readily as English. When I graduated from college, I thought that I was so well equipped as a Latin scholar that I decided to become a professor of Latin and devote my life to the teaching of that language.

The college had at that time inaugurated a system of prize offering. One man had given to the college some money, enough to buy a medal each year which was to be given to the best scholar in the college, as decided by the faculty. Another prize was offered for oratory. We had two debating societies in the college, one was the Lewis Literary and the other was the Crestomalian.

In addition to Latin I studied Greek, German and French and early English; I also became somewhat familiar with Spanish and Italian. When I graduated, the only thing I was really equipped to do was to teach Latin. My ambition was to become principal of some city school, (not called high schools in those days, but that is what they really were). I applied for schools but my personality was against me. I looked

like a green country boy and I couldn't get a position "on my face" at all. After working all summer and failing to get a position, I finally decided to take a post graduate course in Sanscrit, also in psychology which in those days was only another name for philosophy. We had two of the finest teachers in the country in those two lines. The president of our college was the greatest intellect I ever came in contact with and Professor Avery was also an accomplished scholar. After the year began, the faculty decided to appoint me tutor of Latin, so I had all of the preparatory Latin classes. It was my ambition to turn out the best Latin classes that had ever studied in the college. My work that year was very strenuous. I taught four classes of one hour each and took two hours daily work in Sanscrit and philosophy. The result of it was by Christmas time I was almost a physical wreck. I had not only the four classes and the two recitations daily but I had six hours private teaching to do besides, the last necessary to earn my way. During that year I had kidded myself into thinking I was a linguist because a linguist was the greatest thing in that college. But after I had taught Latin for a year it dawned on me one day that I was not a linguist. I found myself rebelling and apologizing for the language. No man can teach either Latin, Greek or French classics without being ashamed of himself because he has to apologize for the corruptness and rottenness of those languages and I felt as though it was beneath me to spend my life teaching a language for which I had to continually apologize.

At the close of the year I decided that I would "ditch" the whole thing and take up botany, the thing that I loved best, and become a field botanist, doing original research work in the wilds. So I announced to my friends the following spring that I was going to Colorado to botanize and to explore the state. To go to Colorado then was just about the same as going to the jungles of the Amazon or to Tibet now. It was considered very dangerous because the country was supposed to be full of wild animals, particularly buffalo, also wild Indians and half-civilized white men; it was like taking your life in your hands to go there. But I was a husky young man and not afraid, with supreme confidence in my ability to take care of myself anywhere, so I went. When I got to Colorado, I found the buffalo were gone; I found that there were no wild animals except jack rabbits which were not harmful; I found the wild Indians were way off in the less populated parts of the state where I did not go, and not to be feared at all. I spent the entire summer exploring the high and low mountains of Colorado and made a big collection. I went back in the fall loaded down with 1100 different kinds of plants; I spent the winter studying them.

The next year I was appointed a professor of natural sciences at Colorado College in Colorado Springs to take the place of Professor Loud who was going East to publish a book. I went there and took up classes and taught them until the end of the year in July. In my class there was a widow lady, a sister of General William J. Palmer, president of the Rio Grande Railroad and the most famous railroad man in Colorado. I made it a rule to go out after class time to botanize in the hills. One day I went over the Gleneyre and on the way back, after walking over the mesa six miles I came to a bundle of letters scattered over the road. A man in a buggy had passed me a few minutes before and I felt quite sure he had lost the letters. I picked one up and read it but it was not important. I read another paper which was the will of General Palmer, stating that he might be shot as he was commanding a firing party in the Grand Canyon of the Arkansas; if an accident did happen he wanted to leave his will, disposing of his property. Then he went on to state how many millions of dollars were to be spent for this and that. Knowing it was a very important document, I put it in my pocket. Up to that time I had never met General Palmer but I knew that he lived in Gleneyre. I took the letter with me and the next day in class I told his sister if he so desired I would return it to him. Accordingly he sent word to turn the letter over to her.

At the end of the school year, which was in July, I pulled out for Salt Lake City and I botanized around Alta (in Big Cottonwood Canyon) and collected some thousand species of plants. Then I went back to my Iowa home and put the plants up in sets and shipped them to Europe.

Perhaps I had better say a little about conditions those days. Wichita in 1878 was just a little bit of a ramble shack of a town with only one-story houses and no trees. Dodge City was a typical saloon town way off in the west part of the state with a

string of shacks along one side of the railroad track for a quarter of a mile or so, every other shack being a saloon. There were hitching posts along the street where the cowboys tied their horses while they were gambling in the saloons. LaJunta was a rough railroad and freighting town with gambling halls and saloons galore. When I got to Pueblo on a broad gauge road, I had to transfer to a narrow gauge—a rattle trap of a road with jerky cars which were very inconvenient to ride in. The only other roads were wagon tracks over the plains. Often times the original sod had not yet been destroyed and the roads were bumpy and rocky and hard on vehicles. The only means of getting through that country outside of the railroads was to go in a buggy or wagon or horseback. About the best you could do in a day with a horse was thirty miles.

My equipment in 1878 consisted of a little broncho mare and a light covered spring buggy which I drove to Denver, then from Denver to Georgetown by way of Idaho Springs and back twice, then over the Argentine Pass, (13,000 foot elevation), down to the Grand River, up to Breckenridge and over to Fair Play and Middle Park and then over Weston's Pass onto the Arkansas below Leadville and down to Pueblo.

My little broncho mare was a wonderful animal. She probably wouldn't weigh more than 800 pounds but she carried me and my outfit everywhere. She had only one disagreeable feature. Whenever she got frightened she would start to kick and she wouldn't stop kicking until she had kicked herself loose and run away. By the end of the season, my harness consisted of scraps of leather and baling wire.

One day I went over the Argentine Pass where the grade was cut out of the vertical face of a cliff and there was just a narrow path a foot wide on the outside of the track separating me from an abyss two or three thousand feet deep; a single track road and very steep. When I was going down that grade, my breeching gave way and let the wagon onto the horse. Under normal conditions she would have immediately begun to kick and killed herself by being drawn over the cliff, but when it happened this time, she just stood and trembled. I immediately spoke to her, sprang out of the rig, worked my way around to the other side of the buggy, holding the buggy back as well as I could, and fixed the harness, then drove down off the Pass into the forest. From that time on I had a wonderful respect for the intelligence of that broncho.

In those days, I had no camp equipment except a bake oven and a frying pan. I cooked my own meals. I had a rifle along and would occasionally kill a chicken or a jack rabbit. I managed to buy enough butter for my bread and got along very comfortably through the year.

When I reached Salt Lake City, it was a typical old-time Mormon town without a paved street or a paved sidewalk. Main Street from First South to Second South had a layer of cobble stones answering for pavement which was covered with several inches of dirt, muddy during wet times. Aside from this cobble street, all others were dirt streets. Main Street was the only street in town with any stores on it of any account. On the southeastern corner of Second South and Main was the Godbe Drug Store, which was the most stately building in that part of the city. Down a block and a half below that on the west side of the street was the Walker Hotel, which was the swell hotel of the city. The postoffice was in what was called the Groesbeck Block, 215 to 217 South Main. About a half block below the postoffice was Pat Lannan's Meat Market. Pat at that time was the leading butcher of Salt Lake City. In after years he became the owner of the Salt Lake Tribune, but in those days he was just a red-faced Irishman.

Brigham Young had been dead two years; the president of the Mormon Church was John Taylor. All over the city were typical Mormon residences which were generally one-story buildings made of adobe with a door for each room. There were a number of residences at that time which had as many as six apartments where the Mormons were raising six families. It was chic those days to have several families and the fact of the matter was that a man was not a good Mormon in those days unless he was a polygamist.

The only means of conveyance in that country were lumber wagons and buggies and horses and mules. We had a city railroad at that time, each car being drawn by a little team of rat mules. If you wanted to go down town and saw a car up the track a block above you, you could always get down town by walking before the car got there. At the time when I arrived in Salt Lake City, in 1879, there was one Congrega-

tional church, one Methodist church and one Presbyterian church. All the rest were Mormon churches and some other Latter-day Saints which in those days were called Josephites.

The Deseret University was located on the present site of the West Side High school and presided over by Dr. Park, an old bachelor Mormon. There were two high-class Gentile schools in the city at that time; one was called Salt Lake Academy, which was located in a vacant lot back from the street and immediately west of the present site of the Walker store, a school with something like two hundred students. The other good Gentile school was the Collegiate Institute run by the Presbyterian church and presided over by Professor Coyner, who was a very efficient teacher. He had with him at that time a Miss Kelly who was a teacher of botany. She was a very capable woman who had made collections of plants in different parts of the state. Among them was one new species which she asked me to name, so I decided to name it for her and intended to call it *Gilia Keileyyae*, but Dr. Asa Gray (of Harvard) objected to the name. He said there wasn't any such Latin combination that I could possibly make and he suggested that I use some other name. I didn't want to antagonize Dr. Gray but I didn't propose to give up the name *Gilia Keileyyae*. About that same time Miss Kelly married John McVickar, the leading assayer in Salt Lake, so I finally published it as *Gilia McVickarae* and that is the name it is known by now. E. Benner was the principal of the Salt Lake Academy. He was, I believe, a graduate of Amherst College and the founder of the school. The pastor of the Congregational church was Walter Barrows, a very popular preacher. I believe that the Reverend R. G. McNiece was the pastor of the Presbyterian church. Those two churches contained the cream of the Gentile element of Salt Lake City at that time.

John T. Lynch was postmaster of Salt Lake City and the head of the political element that was anti-Mormon. He was a stately gentleman of the old school for whom I always had a very high regard.

I presume that I will not give in proper order, as to prominence, the names of different people, but I list some. E. L. T. Harrison was one of the founders of the Salt Lake Tribune and an apostate Mormon; W. S. Godbe was also one of the founders of the Tribune, also an apostate Mormon. In the early days W. S. Godbe was a financial leader in the Mormon church; he suggested the organization of Z. C. M. I. Then for some reason or other, he and Harrison withdrew from the Mormon church and were at the head and front of the anti-Mormon element which opposed Brigham Young. Bishop John Sharp was the president and general manager of the Utah Central Railroad which was just finished to Frisco the year that I arrived. He was a fine gentleman. He had two fine sons whom I knew very well, John Sharp and James Sharp, both of whom became prominent in after years. George Q. Cannon at that time was Representative to Congress. Charlie Penrose was editor of the Deseret News.

In those days the agitation against polygamy was very intense and the Edmunds Tucker law was passed, putting in the hands of a commission the government of the state of Utah and occupying the place of the governor.

When I first came to Utah, Pat Connor, the fiery, red-haired Irishman, was still alive and vigorous. I knew him very well. He used to talk to me and tell me about his early experiences, the massacre of the Indians on Bear River and his entrance into Salt Lake City at the head of the regiment which founded Fort Douglas. He told me he came in with his command on foot and halted the men between Fourth and Fifth South on West Temple and kept them standing there for one hour. He said to me: "Somebody asked me what I had my command halted there for, and I replied that I was waiting for somebody to step on my coattail." Then he marched his command up South Temple and east to the site of Fort Douglas where he founded that historic place. At the time I knew Pat Connor, he was getting very gray and had been retired from the service. He was noted for the number of cigars he could smoke in a day and the whiskey he could punish; he was generally more or less under the influence of liquor but a fine old man for all that.

It was in the year 1879 that I first became acquainted with Liberty E. Holden, who was the father of Bert Holden, the organizer of the United States Mining Company. In those days Bert was a young boy; he had one brother and one sister, as I remember. They were children going to church with their parents on Sunday and I

presume going to school, but I am not sure that they attended the Salt Lake Academy. I became well acquainted with the family and we visited back and forth. It was along about that time that Bert was sent back to Harvard and graduated with honors; he was one of the great football stars of his time. I remember he told me that in a football jam he had nearly every rib in his body broken. Bert and others organized a science club; I was invited to lecture to it. His father at that time was the owner of the Old Jordan Mine and invited me to look it over. Bert, after his graduation from college a few years later, became the active superintendent of the mine and he was in charge when I inspected the property. I remember one place in the mine there was a body of galena ore which was about 50 feet high, long, and wide, almost solid galena. Bert became an expert mining geologist. He was characterized by his great mining knowledge and his excellent judgment. He didn't hesitate to invent a new theory about the occurrence of mineral in veins if it suited his interests. I remember in one of the great lawsuits against his company he advanced the theory of mineral zones to account for the origin of the great deposits of lead in the Old Jordan, which was a very unique theory. This was in about the year 1890, possibly a little later.

In the spring of 1890, I received a telegram from General Palmer to join an engineer by the name of Green and explore a proposed railroad route from Tucson, Arizona, to Salt Lake City. Up to that time all I knew of General Palmer was by hearsay; I had never met him. Probably the only reason I was called upon to make the examination for him was because ten or eleven years before I had done him the favor of returning the will which I found. I felt that I was utterly unfitted to make any such examination or report and I was very much surprised to find myself called upon to do it. I packed my grip, took the first train out for Pueblo and landed in Tucson and began my trip. We bought a team of mules, two saddle horses and a covered wagon and struck out for the north. Arizona from Tucson north was carpeted with a garden of alfalfa. It looked like a perfect vegetable paradise. There was no stock anywhere. I counted some fifty cottontails, over one hundred jack rabbits and perhaps two hundred fifty quail every day as they crossed our track ahead of us. I would tie my horse to the wagon, start out afoot ahead of the wagon and kill enough quail for supper. Grass was knee-high all over the country except around water holes; within eight miles of a water hole it was all eaten off. We had two 20-gallon casks on our wagon for water for our animals. We would fill them up at the last water hole and then drive out ten miles onto the desert where we would camp and stake out our horses. We very seldom made over thirty miles a day. We passed through Globe, crossing the Salt River and up through the Tonto basin to Rye and over to Flagstaff. Near Rye there was a hill we had to go over about one mile long which was covered with boulders about one foot thick; our wagon had to be lugged over that. This was about the worst experience I had ever had in my life. When we got on the great Mogollon Plateau above Rye, we had forty miles, more or less, to go to get to Flagstaff over lava roads where the lava was so sharp it cut our horses' hoofs. At Flagstaff we were informed that the ferry at Lee's Ferry had been washed out. This frightened my companion, Mr. Green, and he said we would have to turn back, we couldn't go any further now. I said to him: "We are not going to turn back, we are sent by the railroad officials to explore this country and we are going down to the Colorado River and if we can't get across when we get there we will turn around and come back, but I am not going to turn my back until I am forced to." So, seeing I was determined to go, we traveled on. On that trip from Flagstaff to Lee's Ferry, I picked up a large number of very interesting new species of plants which I later on described and named. When we got to the ferry, we found that it was not operating. The river was very high and running like a mill race. We shot off our guns and pretty soon a man appeared in a skiff and landed at our feet. He was Mr. Johnson, the son-in-law of John D. Lee who had been executed a few years before. He said he could take us across but we would have to swim our animals and he would have to take the wagon apart to carry it over. I told him to go ahead and do it. So we swam our mules and nearly drowned one of them in doing it, but got across. Then we hitched up and started on. For forty miles we had sand three spokes deep to drag through before we got to House Rock. From House Rock the road was good on up the valley to Tropic and from there we crossed over the plateau to Panguitch. We pulled up to the hotel at

Panguitch, which was presided over by the polygamous wife of a Mormon who was hiding. She concluded that we were United States deputy marshals hunting for her husband and was frightened almost out of her wits to see us heavily armed men come into the town. But she said nothing and played the game bravely; the next morning we struck out for the north. It was ten years after that before I learned of her predicament. It was in those times that the United States government was hunting out the polygamous in that section and sending them to the penitentiary.

In due time I had all my samples, taken from the various mines that I had explored on the way, and I worked out my report, giving my version of the resources of the railroad and stating that in my judgment it would not pay to build the railroad to Tucson any further than Marysvale, although they might possibly find timber enough on the head of the Sevier to justify building that far. There were no real resources, however, sufficient to warrant the building of a road.

Soon after I received a telegram from General Palmer telling me to meet him down the road in his private car, so I struck out and met him—the first time I had ever seen him in my life. He proved to be a most wonderful man of medium stature, red-haired and freckled-faced, but all business. After supper he took me out into the sitting room of the car and began to ply me with questions. He asked me questions about every possible subject involved in the expedition, two-thirds of which I could not answer. I never was so humiliated in my life. I thought I had made a complete report and yet there he was, not knowing anything about the country, but asking me more questions than I would ever think of. I went to bed that night in terrible distress. I said to myself, "the jig is up, he will never employ me again." In due time, he bade me good-bye and told me to present my bill to the treasurer, Mr. Colton, and it would be duly settled.

In a few months, I received another telegram from him telling me to take charge of another exploration and go west from Salt Lake City to Cherry Creek, Nevada, and explore all the resources of the Deep Creek country and report to him. That was an all summer's job and he said Mr. Colton would supply me with the necessary funds. So Mr. Colton gave me a letter of introduction to old John Devine, the great financial boss of Deep Creek who practically owned that country, telling Mr. Devine to let me have any money I wanted and to charge it up to him. Old John was an old bachelor peddler who had gone around years before with a pack on his back selling goods wherever he could get a buyer. He had built himself a little adobe house in Deep Creek valley, started a store and pretty soon owned nearly the whole country, had thousands of head of stock and all the spare cash that was available. So, when I went and presented my letter, he read it and simply said to me: "Take what you want." So I loaded up with provisions and he gave me a bill. All summer long whenever I ran out of supplies, I went up to old John either for money or for supplies. When the season was over my account showed that I owed him \$50.00 more than his account did, but he wouldn't take any more money than what his account showed, so we never settled it up.

I made it a rule on that trip to examine and sample every mining prospect there was in the whole country from Tintic north and west to Osceola and Cherry Creek. In the fall I went back to Salt Lake City with a wagon load of samples and voluminous notes. Then I bought a complete laboratory for wet and dry work and employed two chemists, one of whom was Victor C. Hikes who assayed and analyzed every sample of ore that I took. In the spring when the work was completed, I made out a voluminous report, the gist of which was that he couldn't make a mistake to build out to Deep Creek for I believed the country had practically unlimited mining resources. So he bought the rails to build up to Deep Creek and in the following year the great financial crash of 1893 came and put an end to the whole business and resulted in the building of the Marysvale branch.

Financial conditions were such thereafter, particularly the great surplus of silver, that the Rio Grande feared to build west of Salt Lake City. In order to prevent rival railroads from going into that country, he sent another geologist out there after me to go over the same field and report on the same country and apparently instructed to bring in an unfavorable report. He asked me before this was done if he were to send another mining engineer to look at the country who wasn't expert on "natural indica-

tions" but a typical mining engineer, what the report of that engineer might be. I said to him: "He will turn the whole country down." So this was the kind of a man he sent out and whenever any competing railroad undertook to raise a question about the resources of the Deep Creek country, he always cheerfully offered to let them see the report which he had on that country, but he never let them see my report.

It was along about this time, if I remember it, that the Highland Boy Smelter was erected at Midvale. It was the first copper smelter that was built in the valley and it very soon produced such large quantities of fumes that the crops of the farmers were ruined and their animals were poisoned and died. I was called upon by an old gentleman by the name of Evans, whose lawyer was E. B. Critchlow, to examine the country and report to him what damages were done by the smelter and how to fight the case in court. Up to that time there had never been any litigation in the West on those lines. To my mind, all scientific questions are mere matters of fact. It isn't a question as to whether this thing, that thing or the other is injuring John James or Bill Smith. It is just a question of what the facts are, if the damage can be remedied, and how it can be done. So I was called upon to investigate first hand this entire question, which proved to be a tremendous matter in after years. I stated emphatically that the damage that was being done by the smelters was avoidable, that the fumes could be controlled by the smelters if they used the proper apparatus and that they could make more money out of the fumes they saved than it would cost to operate the apparatus. The contention of the smelting companies was that there was no known way by which the fumes could be prevented and that if they couldn't run the smelters in the way they had been operated, they would have to discontinue. We won the case and shut the smelters up. Some were later dismantled.

At about that time, other smelters began to treat copper ores and produced the same kind of fumes and did the same damage. Litigation was started against the American Smelter at Murray. There were quite a number of farmers joined in this suit. The facts were substantially the same and the case was decided against the smelter and appealed. The up-shot of the whole thing was that the smelters were told that if they could not control the smoke they would have to cease operations. The smelters in the meantime had again told the court there was no known way by which fumes could be controlled. So the decision was to go out of business. Then in a supplementary hearing, the smelters came into court and stated if the court would give them a year's time they could put in the necessary apparatus and stop the damage and the court gave them the year's time. The United States Smelting Company began at once to experiment to determine means of preventing the damage and they finally claimed that they could stop the damage by certain processes. The bag house process was the basis of their defense. The United States was the only smelter, in my opinion, that went at the problem with the intention of really solving it. It wasn't long before the fumes which the smelter emitted were inconsiderable and the damage done by them was negligible.

I got the reputation for being a bitter enemy of the smelters and being a mining man it very seriously affected my business and my reputation. I felt, however, that there was nothing else for me to do but fight for what I believed was right and that it was up to the smelters to stop the damage they were doing, for I believed it could be done.

About this time, Mr. Ledyard was put in charge of investigations for the U. S. company. One of the first things he did was to come to me one day and ask me to go out with him and look over the district around the U. S. smelter. It was a very unheard of performance for an opposing expert to do and my friends with whom I talked, said that it was a scheme and a plan of the smelter to get me in bad and destroy my reputation and that I had better not go out with him. I said the man didn't live who could get me in bad and I was going. From that time on we have been intimate personal friends. I never had a retainer from the United States Smelting Refining and Mining Company, they never gave me a five-cent piece nor attempted to coerce me nor bribe me in any way. I have always felt they were the ones that deserved the full credit for solving the smelter smoke problem. In late years I have given my attention solely to botany. My retrospection of seventy-five years is filled with many experiences and for the most part pleasant ones.

Word Shave and Haircut for 1932

By A. E. HOWER

Back in the days when our grandfathers started their letters, "I take my pen in hand to let you know," they also "advised" in answer to an "esteemed favor" and "begged to acknowledge a kind communication of the 17th ult." Mid-Victorian gestures in letter writing have gone the way of other bygone styles. The modern keynote is simplicity.

Unfortunately, there are occasional lapses, and just to be sure that you have laid all whiskered words to rest, here is a list whose final burial place should not be desecrated:

Advise.

This word is doomed as a substitute for "inform," "notify," and other words that refer to information. Would you say to your family at the breakfast table, "Please advise me whether there is any cantaloupe in the ice box?"

Along This Line.

Make sure that there is a line.

And Oblige.

Awkward and unnecessary.

Ascertain.

Say "find out" or "learn."

As Per.

For clearness sake, use the English language, and not Latin expressions. Usually "as per" can be omitted; or, we can use English words, such as "according to," "as indicated in," etc.

Assist Assistance.

Say "aid" or "help."

At All Times.

The word "always" tells the same story more briefly.

Attached Hereto.

"We attach hereto a copy, etc." Leave out the "hereto" and you lose nothing from the thought.

Attach, Please Find.

Attached You Will Find.

Simply say "attached is." The reader will find whatever is attached.

At An Early Date.

At the Earliest Possible Moment.

At Your Earliest Convenience.

Completely worn out, and should be retired from active duty. Say "promptly," "soon," "immediately," "at once," or give a specific date.

At the Present Time.

At the Present Writing.

At This Time.

Unnecessary. When you say, "The freight amounts to \$35," that means right now, without adding "at the present time."

Beg.

"We beg to inform, etc." Let's be sure to keep "begging" out of our letters.

Communication.

Do not use a long word when a short one will serve. Say "letter" or "telegram" as the case may be.

Contents Carefully Noted.

Contents Duly Noted.

Carry no conviction unless shown by the answer, and then either expression is unnecessary.

Enclosed You Will Find.

Enclosed Please Find.

Simply say "enclosed is." Why "please find"—the recipient couldn't help finding it if you sent it.

Esteemed Favor.

A trite, ineffective attempt to flatter. Call a letter a letter.

Even Date.

Say "today."

For Your Information Please Be Informed That.

For Your Information I Would Like to Advise You That.

Unwinding while the dictator decides how to start the real message. Don't utter a word until you are ready to say something.

I Wish to Inform You That.

Unnecessary. Merely give the information.

In Due Course.

Avoid generalities. Set a definite time.

In Replying Wish to State That.

Grinding out a lingo while the reader is impatiently awaiting the real message.

Instant.

Proximo.

Ultimo.

"I said it in Hebrew—I said it in Dutch—I said it in German and Greek; But I wholly forgot (and it vexes me much)
That English is what you speak."

Instead of saying "the 17th instant," give the date, "May 17."

In the Amount of.

Just verbiage. Say "Your check for \$35."

In Re.

A legal term. Avoid it in the heading of a letter, and say "about" in the body.

Kind.

Worn to a frazzle in such expressions as "your kind letter," "your kind order," "your kind favor." Leave it out.

Kindly.

Like "kind," this word has been worked overtime. In many instances, it is used incorrectly. In saying "Thank you kindly for this order," we really mean "You are kind in giving us this order, and we thank you." What we say, however, is that we thank kindly, meaning that we are kind. The best way to avoid this error is to omit the word "kindly."

Locality.

Say "place."

Oblige, and Oblige.

Like the old-style endings "Thanking," "Trusting," "Hoping," etc., "and oblige" is a weak way to close a letter. Just leave this expression out.

Our Mr. White.

Omit the "our," or say "Mr. White, our representative."

Our Records Indicate That.

Where else would we get "our" information? Go ahead with the facts unless reference to the records is really needed.

Permit Me to Say.

Meant as a gesture of courtesy, but has no real force in a business letter.

Regarding This Matter.

Superfluous. You wouldn't tack this on a sentence in conversation. Obviously anything said is "regarding this matter," or should be.

Recent Date.

This doesn't tell anything. Give the date when you can. Otherwise leave out any reference to the date—"your letter (omit "of recent date") about the tariff, etc."

Same.

Do not use same in the place of it, they, or them. "We are investigating this situation, and it (not "same") will be acted on shortly."

State.

Appropriate for the witness stand. In business letters we "say."

Thanking You in Advance.

The out-of-date "ing" ending again!

The Writer.

This cold, formal style has no place in business letters. When you write as a representative of the railroad, say "T" or "me." It is more natural to say "Let me know." than "Let the writer know."

This Will Acknowledge Receipt of Your Letter.

Unnecessary. An answer indicates that the letter was received.

Trust This Is What You Desire.

Weak. Omit except where there is a real doubt, and then say, "If this isn't just what you want, let me know."

Under Date of.

Say "on December 2."

Under Separate Cover.

Sadly frayed at the edges, and frequently unnecessary. Vary it by telling how anything is sent—by mail, by freight, etc., or drop it altogether. "We are sending a supply of blanks."

Up to This Writing.

Obvious. "Up to this writing we have not received a ruling." Let's drop this lingo and simply say, "We have not received the payment."

We Hand You Herewith.

This cannot be done in a letter.

We Note From Your Letter.

We Wish to Call Your Attention to the Fact That.

We Herewith Desire to Notify You That.

We Take the Liberty to.

We Take This Opportunity to.

Only marking time. In most cases these expressions can be left out without altering the meaning.

We Have Before Us Your Letter.

At Hand.

Your Letter Received.

Apparent. We couldn't answer otherwise. Let's drop these expressions.

LATE AUTHORS

King Solomon and King David led merry, merry lives

With many, many lady friends and many, many wives.

But when old age came on them with its many, many qualms,

King Solomon wrote the Proverbs, and King David wrote the Psalms.

Utah Railway Company Notes

Provo, Utah

THOMAS SCHOTT, Correspondent

Mr. W. F. Cottrell, car foreman Provo Joint Yard, has been laying off on account of illness since November 18, and the position in his absence was filled up to November 24, by Orrin Winget, car inspector, and effective that date by W. H. Pickett, car foreman, from the O. S. L. R. R. Co., Salt Lake City.

The current year's repair program on locomotives is gradually coming to an end with the completion of repairs on engine 103, now in the engine house, which will be returned to service about December 7.

The position of mechanical foreman at Provo Joint Shops was abolished October 31; as a result the incumbent, Mr. C. A. Law, displaced Edward Leeks, night engine house foreman, who in turn displaced W. E. Berrey, machinist and federal inspector in the engine house.

Mr. T. Farrell, district manager for the Continental Oil Company, with headquarters at Salt Lake City, was a business caller at Provo Joint Shops, October 28.

Mr. L. H. Warren, district manager for the Shell Oil Company, with headquarters at Salt Lake City, was a business caller at Provo Joint Yard November 12, 19 and 24.

Mr. William Flint, lubricating engineer for the Standard Oil Company of California, with headquarters at Oakland, California, was a business caller at Provo Joint Shops on October 29 and 30 and November 3 and 10.

Mr. Don Coppin, local salesman for the state of Idaho for the Standard Oil Company of California, with headquarters at Pocatello, Idaho, was a business caller at Provo Joint Shops November 3.

Mr. W. D. Cook, lubricating engineer for the Union Oil Company, with headquarters at Denver, Colorado, was a business caller at the Provo Joint Shops October 26 and November 2, 11 and 24. Mr. Cook was formerly representative for the Locomotive Stoker Company and is well known in railroad circles.

Mr. J. F. Long, superintendent, Motive Power and Machinery for the L. A. & S. L. R. R. Co. unit of the Union Pacific System, with headquarters at Los Angeles, California, was at Provo Joint Shops on business October 29 and November 21.

Mr. F. S. Moody, lubricating engineer for the Texas Oil Company, with headquarters at Kansas City, Missouri, was a business caller at the Provo Joint Shops October 27, November 2 and 17.

Mr. Fred Hischer, local salesman for the Standard Oil Company of California, with headquarters at Provo, was a business caller at the Provo Joint Shops November 2, 3 and 10.

Mr. McCaulley, lubricating engineer for the Pennzoil Company, with headquarters at Los Angeles, California, was a business caller at the Provo Joint Shops November 11.

Mr. C. E. Beveridge, engineer maintenance of way and structures for our company, with headquarters at Martin, Utah, was a caller at Provo Joint Shops on business on November 7 and 20.

Mr. Brown Bush, safety appliance inspector for the Interstate Commerce Commission, with headquarters at Salt Lake City, made an inspection of equipment at Provo Joint Yard on October 19.

Mr. E. F. Millbank, service engineer for the Detroit Lubricating Company, with headquarters at Chicago, Illinois, was a business caller at Provo Joint Shops October 27.

Mr. J. L. Dorsey, material accountant for our company, with headquarters at Salt Lake City, was at Provo Joint Shops on business November 23, then he departed for the Kingmine District.

Mr. Earl Cebell, railroad representative for the International Correspondence Schools, with headquarters at Denver, Colorado, was a caller at Provo Joint Shops November 12.

Mr. P. A. Mattingly, general manager of the American Foundry and Machine Company, Salt Lake City, with headquarters at Salt Lake City, accompanied by Mr. E. A. Leupold, sales manager for the Structural Steel and Foundry Company, with headquarters at Salt Lake City, were business callers at Provo Joint Shops November 16.

Mr. H. T. Coffey, chief electrician for the Union Pacific System, lines west of Pocatello, Idaho, with headquarters at Los Angeles, California, was at Provo Joint Shops on business October 31.

Mr. W. J. Kirsch, master mechanic for the L. A. & S. L. R. R. Co., with headquarters at Salt Lake City, was at Provo Joint Shops on business October 19.

Mr. J. W. Burnett, assistant general superintendent, Motive Power and Machinery, for the Union Pacific System, lines west of Pocatello, with headquarters at that city, accompanied by Mr. J. F. Long, superintendent, M. P. & M., for the L. A. & S. L. R. R. Co., with headquarters at Los Angeles, California, and Mr. W. J. Kirsch, master mechanic for the latter company, with headquarters at Salt Lake City, made an inspection of Provo Joint Shops November 14.

Mr. U. J. West, representative and field man for the Oxnard Railroad service, with headquarters at Los Angeles, California, was a business caller at Provo Joint Shops October 31, enroute to the Uintah Railway Company, Atchee, and called again on his return from Atchee, November 5.

Mr. Dewey Snelson, general clerk for the L. A. & S. L. R. R. Co. Stores Department at Los Angeles, California, and formerly employed as stenographer and clerk in the local store, was a visitor at Provo Joint Shops November 2, while he was enjoying his annual vacation.

Mr. R. J. Vaughan, superintendent for our company, with headquarters at Martin, was at Provo Joint Shops on business November 23.

WHAT'S IN A NAME

I knew a man named Early,
And he was always late,
And Joy was always surly,
And Love was full of hate,
And Brown he was the greenest
Of all the men I knew.
And Good he was the meanest,
And White was always blue,
And Stout was lean and lanky,
And Short was rather tall,
And Merryman, the cranky,
And the sourest man of all,
The sickest man was Weller
And the healthiest man was Payne,
Why try to tell a feller,
By his title or his name?
There's a little lesson in it,
Which is why I tell the yarn;
You can see it in a minute—
It's as big as any barn—
Name is not an indication
That you'll get so very far,
No, your final reputation
All depends on what you are.

VESSEL WITH CARGO OF VALUABLE FURS VANISHES IN STORM

Point Barrow, Alaska, Dec. 1.—The treacherous Arctic ice pack, quiet after a three-day storm, today held the secret of the disappearance of the vessel Baychimo, lost in the shifting ice.

Whether ground to pieces or sunk, where it had been frozen in for two months some sixty miles south of here, or carried away to sea by the moving floes, was not known by the five members of the crew, who had been living in winter quarters on shore.

A high ridge in the ice pack, where the vessel had been resting, remained, the crew reported in a message received here last night, but no trace of the wreckage could be found. A search ten miles from shore on the ice, and to the north and south failed to reveal any signs of the steel hulled vessel.

The Baychimo, a Hudson Bay Company fur trading ship, left these far northern waters too late to get free of the ice pack. During the brief Arctic summer it had visited here and points to the east along the northern Alaska shores.

Breaking its way safely through some sixty miles of young ice to a point twenty miles south of Wainwright, older and heavier ice was encountered and the vessel was frozen in for the winter. Air planes were used to fly out a number of passengers and members of the crew to Nome, and five men were left.

On the night of November 26, a message they sent here said, a fierce storm arose and next morning, when it moderated slightly, only a huge pile of crushed and broken ice could be seen offshore where the Baychimo had been frozen in.

The mound was estimated to be fifty feet high and increasing in size. The storm became more severe, with the gale reaching a 45-mile an hour velocity, and continued for two days.

At noon of the 29th the weather finally moderated and the men went off shore. The ship could not be found and only a mound, or pressure ridge, was left in the ice.

Aboard the Baychimo was a valuable cargo of furs, picked up at many north Alaska trading posts.

Of the king's creation you may be; but he who makes a count ne'er made a man.—Southerne.

Huge Midvale Scale O. K.

Mr. Merritt Brady, scale inspector with United States Fuel Company since March, 1921, with headquarters at Hiawatha, Utah, gave us some interesting information regarding the huge scale used at Midvale.

November 24, 1931.

Mr. Edgar M. Ledyard,
Editor, Ax-I-Dent-Ax,
Salt Lake City, Utah.

Dear Sir:

While at Midvale last week inspecting and repairing scales, Mr. F. M. Wichman, plant engineer, called my attention to a short write-up of the track scale installed in August, 1930, at the Midvale plant of the United States Smelting Refining and Mining Company. Since I was present and participated in the recent test of this scale by the Bureau of Standards Car No. 2, I was asked to give a few more facts in connection with installation and recent test.

The scale at Midvale is of the Fairbanks Morse track pattern, two sections, 60" weigh rail of 200 tons sectional capacity, installed August, 1930, by me as scale man for the company.

There are only two other scales in the west as large as this scale, one at Tooele, Utah, and another at Long Beach, California, both of the same capacity.

The recent test by the Bureau of Standards test car No. 2, in charge of Mr. David Smith, was made on October 16, at which time the D. & R. G. W. scale inspector, Mr. McClelland, who was put in charge of all scales on the D. & R. G. W. System last spring, had the test car on the Colorado Division brought from Denver to be calibrated on this particular scale while the government car was here, as the scale usually used to calibrate this test car was not what he thought it should be. After the calibration was made, it disclosed that this test car was 120 light from what the government test showed on the Midvale scale.

The second test car owned by the D. & R. G. W. Railway calibrated at the same time is used on the Utah division of the D. & R. G. W. Railway. This car was first calibrated on this scale last spring and was only 13 pounds off the weight obtained six months ago which was due to the wear and tear of wheels and brake shoes.

Mr. Smith, who was in charge of the car, gave us a very nice compliment on

the condition and maintenance of the scale at Midvale. His test of 80,000 pounds showed the scale to be absolutely correct.

Yours truly,
MERRITT BRADY.

GREETINGS FROM L. D. ANDERSON

We are pleased to have the following from Mr. L. D. Anderson.

"Leningrad, Nov. 13, 1931.

"Isn't this a striking night view of the entrance to the railway station of Helsingfors, Finland? On a recent visit I found it a delightfully pretty, quaint and clean place, smart and up-to-date in every way.



Entrance to railway station, Helsingfors, Finland.

Really I was quite surprised. Do let me hear from you some time. Warm regards from

"L. D. ANDERSON."

The above was sent on a postcard; on the reverse is the picture of Helsingfors station reproduced above. A wonderful depot for any country.

He That Swells In Prosperity Will Be

Merry Christmas

Christmas comes but once a year,
And when it comes, Oh! Dear! Oh! Dear!
There are ties and cuff links, too,
Some things old and some things new.
The things we want we never get.
We'd like to get a check—you bet.
'The money we could use darn' well.
The shirts and ties we cannot sell.
Handkerchiefs as big as sheets,
And red hot socks that nothing beats.
Here we sit and sing the blues,
We moan and moan, but what's the use?
'Cause we should smile and all be glad.
Think of the cigars they give to DAD.

Intelligence Test

The examiner was questioning a candidate for the position of engineer:

"You are driving an engine down a steep incline at an excessive speed," he said "What do you do?"

"Make a brake application," said the candidate.

"Doesn't act!" shot back the examiner.

"Put the brake handle into emergency position," replied the other.

"Does not reduce speed sufficiently," went on the examiner.

"Reverse the engine and turn on steam," said the candidate readily.

"The wheels refuse to grip the rails?" came the next question.

"Pour sand on the rails," came the reply.

"Sand is damp and won't pass through the pipes." The examiner put the question with an air of triumph. "Now what do you do?"

"Let her rip; we're on the level now."

High Finance

"Can you loan me five dollars?" said Jones.

"Sure," said Smith. "Would you rather have an old five or a new one?"

"A new one of course," said Jones.

"Here is the one," said Smith. "I'm four dollars ahead."

Idle Curiosity

Patient: Doctor, is there any danger of the operation proving fatal?

Surgeon: Really, my good man, considering that we are experimenting on you free of charge, your idle curiosity is hardly good form.

Never Again

Judge: "What is the verdict of the jury?"

Foreman: "We find that the defendant is not guilty, your honor, but we recommend that he be warned not to do it again."

Results of Recent Anatomy Tests

Boners are actual humorous 'tidbits found by teachers in examination papers, essays, etc.

A sure-footed animal is an animal that when it kicks it doesn't miss.

Truancy is something which has been proven to be true.

Blunderbuss is the name the British have given to their buses.

What kind of a noun is trousers?

Uncommon noun because it is singular on top and plural at the bottom.

The esophagus is the thing the backbone leans on.

How He Worked

Policeman: "How did you get that jar of honey?"

Tramp: "Well, I admit I don't keep no bees; but what's to stop a fellow squeezing it out of the flowers himself?"

They Done Nell Wrong

"I got a letter from the college that says our Nell's been stealin'."

"What?"

"Says she's takin' home economics."

Pome, a la Chicago

Little Willie, cute young prankster,
Shot his father, playing gangster.

Said his mother, in fits of giggling,

"The other barrel, he's still wiggling!"



Sure To Shrink In Adversity—Colton

Farm Relief

"How did you find things down on the farm this summer? Crops good, I hope."

"Well, father did fairly well on his barbecue, but he just about broke even on his gasoline and oil."

Proceed

Said one lawyer to the other: "You are crooked."

Replied the second lawyer: "And you're a liar!"

"Now that both parties have identified each other," remarked the judge, "we will proceed with the case."

Happy Returns

The young poet presented his latest ode to the busy editor.

The latter read it hurriedly.

"You haven't put a title on it," he said. "What do you propose to call it?"

"My Birthday," said the poet, proudly enough.

The editor handed him the manuscript.

"Then," he said, "I wish you many happy returns."

Taking Ways

Visitor: "I know you are not entirely bad, because I've been told you took all the prizes at your local flower show."

Prisoner: "Of course I did; that's what I'm here for."

Not Guilty

She: "Back in the city again? I thought you were a farmer."

He: "You made the same mistake that I did."

American Gandhi

Amateur stock market player after a day in Wall Street: "Boy, my hat and lioncloth!"

Not Serious

Police Sergeant: "Is the man dangerously wounded?"

Patrolman: "Two of the wounds are fatal, but the other one ain't so bad."

Only 9999999999999999%

The newly-elected president of a banking institution was being introduced to the employees. He singled out one of the men in the cashier's cage, questioning him in detail about his work, etc.

"I have been here forty years," said the cashier's assistant with conscious pride, "and in all that time I made only one slight mistake."

"Good," replied the president. "Let me congratulate you. But hereafter be more careful."

Says Henry

"Isn't this an ideal place for a picnic?"

"Yes! Fifty million insects couldn't be wrong."

Page Ali Babi

"Now, boys," said the teacher, "I want to test your knowledge of geology. Jones, tell me what you know about alabaster."

"Yes, sir, he was the one who caught the Forty Thieves!"

Now "At Sea"

A passenger on the steamboat complained to the purser that his clothes were lost.

"What did you do with them?" the purser asked.

"Oh, I put them in a little closet with a round glass door."

And They Were

"Something must be done," said the li'l woman as she smelled the biscuits burning.

See A Contingent Lawyer

First Cannibal: What's the matter with me doc? I feel mighty sick.

Cannibal Doc: What'd you have for dinner?

First Can.: A gangster.

Can. Doc.: Lead poisoning!

Technical Note

She: How do the freshmen keep those dinky little caps on?

He: Vacuum pressure.



ALL IS FORGIVEN

Ax-I-Dent-Ax Score Card for Thirty-three Months

March, 1929, to November, 1931, Inclusive

For thirty-three months the Ax-I-Dent-Ax has been edited in Salt Lake City. Counting covers, maps and headlines, 352,800 linear inches of type have been edited—5½ miles. Each issue has averaged 33.9 pages, somewhat larger than the average house organ. Many house organs carry advertising and the majority of them have a large number of personal notes and pictures, particularly railroad magazines. In some the type is set very loose and articles are spaced out.

As a rule everything sent to this office is published; the main purpose of the Ax-I-Dent-Ax is to emphasize the activities of this company.

To some extent, at least, this company is judged as any other company is, which publishes a house organ, by the appearance and make-up of its magazine.

In addition to being distributed to all units represented below, it is sent to upwards of one hundred colleges, technical schools and libraries and to about the same number of individuals, mostly technical men who have an interest in the activities of the company. Every week requests come in from various sources for back numbers.

The tabulation below which covers certain data on thirty-three issues may prove interesting. Under special numbers, Martin and Provo are each given credit for the Utah Railway special number; the same is true of Hiawatha and Kingmine for the U. S. Fuel Company.

There have been some changes in units reporting, also in correspondents during the past thirty-three months. The tabulation below is based on the units reporting currently to the Ax-I-Dent-Ax.

UNIT—	Special Numbers	Special Contributions	Correspondents' lines of type, each 2¼ inches long
Bingham	1	10	330
Boston		2	88
East Chicago	1	20	613
Fairbanks	1	11	328
Fierro		1	
Hiawatha	1	10	408
Kingmine	1	10	428
Lark		1	198
Martin	1	17	2,857
Midvale	1	44	1,710
New York	1	6	48
Nome	1	6	894
Pachuca	1	6	307
Provo	1	17	3,416
Salt Lake City.....		36	1,055
Seattle	1	1	394
Sunnyside	1	11	1,623
Total	13	209	14,697

GIVE US THE NEWS; WE'LL PRINT IT

The news! our morning, noon and evening cry,
 Day after day repeats it till we die.
 For this the city, the critic, and the fop,
 Dally the hour away in tonsor's shop;
 For this the gossip takes her daily route,
 And wears your threshold and your patience out;
 For this we leave the parson in the lurch,
 And pause to prattle on our way to church;
 Even when some coffin'd friend we gather round,
 We ask—"What news?"—then lay him in the ground.
 —Sprague.

Exclusive Closed Corporation Elects Secretary

(Our Anti-Depression Offering for 1931)

By HAM STRUNG

Sports Editor, Ax-I-Dent-Ax

From May 31, 1928 to October 27, 1931, Mr. G. S. Anderson, vice-president of the Utah Railway Company, owned every share of stock in one of the larger subsidiaries known as the U. S. S. R. & M. Co. Hole-in-One Club. The story of how he gained control is best told in the following copy of a newspaper clipping:

Guy Anderson Aces Third at Forest Dale

"While Thursday (May 31, 1928) may have been a rather barren day for many golfers, it did not prove so for Guy Anderson. Mr. Anderson, a Forest Dale golfer, took advantage of the occasion to make himself a hole in one.

"He did it on the third hole, a par three. Authenticity for the deed is sworn by Dr. M. M. McDowell, A. H. Harris and J. H. Harrop, with whom Mr. Anderson was playing."

Mr. D. D. Muir, Jr. wrote Mr. F. W. Batchelder regarding Mr. Anderson's stroke of luck. With what may now be called profitic foresight, along lines of nepotism, Mr. Batchelder immediately wrote Mr. Anderson as follows:

"My dear Mr. Anderson:

"Upon learning from Mr. Muir of your magnificent performance of May 31, 1928, the United States Smelting Refining and Mining Company immediately organized a new subsidiary, to be known as the 'United States Smelting Refining and Mining Company Hole-in-One Club,' of which Society you were designated President. The enclosed picture by our artist, Miss Kennedy, may interest you.

"We are sending, under separate cover, a trophy, testifying to the wonder and admiration of your Boston associates."

We are sorry that due to our lack of color processes in putting out the Ax-I-Dent-Ax, we are not able to reproduce for our readers Miss Kennedy's masterpiece showing Mr. Anderson at the exact moment when he obtained control of this property. A brief description of the painting will not be amiss, however. Mr. Anderson, in possession of a golf club about eleven feet long, is standing on a bluff over-looking a large body of water. Directly between the point where he swung on the spheroid and the third hole

155 yards away, stood a large tree before Mr. Anderson made his shot. Mr. Anderson cut off the trunk of the tree just below the lower branches. The violent flapping of the wings of birds shown in the picture indicate that these avian spectators believed the golf ball to be a comet.

More than two years rolled away. In the meantime Mr. Anderson was "settin' pirty"—having no difficulty with minority stockholders. On October 27, 1931, Miss Ruth Batchelder wrested part of the control from Mr. Anderson as evidenced by the following copy of a clipping which appeared in the Boston Transcript of that date:

Ruth Batchelder Has Hole-in-One at Country Club

"Occurs at 130-yard 16th Hole as She Wins, 3 and 2 from Katherine Townsend.

"A hole in one by Miss Ruth Batchelder in her match with Miss Katherine Townsend featured today's first round play in the annual women's club tournament at The Country Club in Brookline. Going to the sixteenth with a lead of 2 up on her opponent, Miss Batchelder scored her ace at this hole on a drive of 130 yards for the first women's hole-in-one ever registered on Clyde Park links. The winning of the match by the score of 3 and 2 at this point was then only incidental to Miss Batchelder, who was overjoyed with her first 'ace'."

Miss Batchelder was formerly an employe in the Treasurer's department of this company and is considered a member of the organization. Mr. Anderson gracefully surrendered part of his holdings to Miss Batchelder through the following letter:

November 9, 1931.

"Dear Mr. Batchelder:

"I have been advised that your daughter, Miss Ruth Batchelder, made a hole-in-one at the Country Club in Brookline, on October 27, 1931. As President of the Hole-in-One Club of the United States Smelting Refining and Mining Company and associated corporations, I wish to convey through you my congratulations to

Miss Batchelder, and also to notify her that she is accepted as a member of our Hole-in-One Club and is hereby elected Secretary of the Club.

Yours very truly,

(Signed) G. S. Anderson

President, HOLE-IN-ONE CLUB OF THE UNITED STATES SMELTING REFINING AND MINING COMPANY AND ASSOCIATED CORPORATIONS."

Miss Batchelder is certainly to be congratulated on her stroke of luck as a golf player. And in the meantime fortune has smiled upon her in a financial way for the original organization presided over by Mr. Anderson has now gained control of several large subsidiaries according to Mr. Anderson's letter of November 9.

MUSIC OF THE TRAIN

There is something in the motion
And the clatter of a train
That is pleasing to my notion
In its beauty of refrain,
And it brings to me a feeling
That is nothing less than grand
When I hear the whistle pealing
As we speed abroad the land.

There is music in the ringing
Of the locomotive's bell,
And of wheels that go on singing
In a way I think is swell,
While the creaking coaches swaying
As they shuttle to and fro,
Are to me forever playing
A refrain I've come to know.

There are countless pleasing voices
In symphonic chorus blent,
And my heart therein rejoices,
And I'm happy and content.
What may seem like senseless static
When it falls on other ears,
Unto me is emblematic
Of the music of the spheres.

Hear it as it ebbs and rises
In its varied shades of sound,
How it thrills you and surprises
With its melodies profound!
I am filled with an elation
As I hear each sweet refrain,
Voicing all the exultation
Of the music of the train.

—Sidney Warren Mase.

Trusting to luck—minus work—is not confidence: it is like faith without works useless.

Salt Lake City Office Notes

W. W. RAGER, Correspondent

The Engineering Department has considerably changed the office arrangement. The photostat room, which was on the eighth floor, has been moved to a portion of the main drafting room, partitions having been put in. Other changes have been made in the offices which render them more convenient.

Miss Afton Margetts of the Accounting Department has been laid up through sickness, but is again at her desk.

Several of the Salt Lake Office force have had severe attacks of the grip, but have fully recovered.

The Christmas party of the Salt Lake Offices will be held as usual, following the closing of the offices on the 24th. The customary drawing for presents will be one of the amusing features.

The success that attended the various sport events held during the past year between the Salt Lake Office and the plants has been the occasion for regrets on the part of many that there are no competitive games that can be entered into during the winter time. Skating does not appeal to many within the organization, our hills are too steep for tobogganing and coasting, and so far no one has had the courage to suggest skiing.

The many athletic contests of the past year have been productive of a spirit of competition among the employees. As a result there has been a closer association and acquaintance between the plants and the Salt Lake Office. Baseball, tennis and horseshoe contests were held regularly, the Salt Lake Office, Midvale, U. S. Mines and Lark all participating. The U. S. Mines also had a soccer team entered in a league composed of teams from other organizations. It is hoped that this activity will be manifest next year.

We are sorry that this yodeler didn't see the Ax-I-Dent-Ax, but we congratulate Kalends.—Editor.

From Pittsburgh, Peru and such places,
Lauding linotypes, labels and laces,
The house organs come
And, my God, aren't they dumb!
The Kalends in short's an oasis.

When bad men combine, the good must associate.—Burke.

Alaska, Old and New

Sitka, sometimes referred to as the "ancient capital of Alaska," recently gave to the world some interesting documents, the discovery of which was made by Father Kedroff of the Russian Cathedral of St. Nicholas while he was engaged in clearing out old material in the cellar of the cathedral. He found a number of old paper bundles there, musty with age. The pages of the bundles adhered to each other and formed almost a solid mass; the cords by which they were held were long since rotted away. His first impulse was to burn the papers but he was attracted to a detached sheet which, upon close examination, proved to be the earliest recorded history of Alaska known to date.

The discovery was of tremendous value. The bundles were carefully packed in padded cases and sent to Washington, D. C. It will take some time to separate the sheets and record the messages on them. If the research workers are not disappointed in their findings, these documents may prove that the Russians were the real discoverers of the Pacific Coast of North America rather than the Spaniards or the English.

Theodore S. Farrelly, in an article relating to this same subject, has recently asked the following questions:

"How much right did the Russians have when they laid claim to San Francisco? There was, we know, a Russian settlement at the Golden Gate, but did it antedate the Spanish settlement and, if so, by how long?"

It is also his opinion that: "The Sitka documents could produce no more valuable proof than to identify on our modern map the town of Anadir. This town, according to the oral reports which were noted in the capital of the empire, was situated on the Continent of America and was founded by the most pretentious of

the early expeditions, in the time of Czar Ivan IV, better known as Ivan the Terrible, who ascended the throne in 1544. Most histories of Alaska give the date of discovery as late as 1741, including the most recent account by Henry W. Clark, which, while mentioning the fact of rumors of earlier settlements, retained that date for the discovery. Thus, if the papers now in Washington can supply this proof it would advance the discovery date by almost two centuries."

While the antiquarians are delving into old written history, recent history is being made while the dredgers of this company are digging out gold (incidentally uncovering fossils), and airplane riders are scanning the landscape for new prospects.

Steamboats, railroad trains, automobiles and airplanes will soon crowd the spectacular dog teams and their skilled drivers into the background. In fact they are already in the background. Picturesque figures, however, like Leonhard Seppala and others will keep this romantic method of travel alive just as Buffalo Bill revived interest in the Old West.

Mr. and Mrs. Seppala live at Chatanika, where Mr. Seppala is in charge of the Fairbanks Exploration Company's Davidson Ditch. For a number of years he was stationed at Nome, where he supervised the Miocene Ditch of the Hammon Consolidated Gold Fields; both of the above properties are controlled by the United States Smelting Refining and Mining Company.

Mr. Seppala left Fairbanks November 2 for points in Canada and Maine where he will visit relatives and enter as a competitor in dog races. We hope that his skill and usual good fortune which has carried him over many a hard trail, will be with him this season.

In addition to studying "Alaska, Old and New," we are viewing it in transition. —E.M.L.



Leonhard Seppala, his daughter, Sigrid, and trophies awarded him at dog races.

The Nimrods of Southwest New Mexico

By D. C. BEYER

Hanover Bessemer Iron and Copper Company
Fierro, New Mexico

The big game season in New Mexico opened at sunrise on October 20 like a lively morning on the Western Front.

Because of overstocked deer in the Black Canyon area, the Game Commission designated a tract of 100 square miles in which one hunter could take two does or one doe and a buck. About 4000 hunters concentrated upon that area. Unfortunately, for the deer, the Forest Service had opened a new road from the North Star Mesa into Black Canyon and one from Sapillo Creek up Copperas Canyon to Gila Flats.

The party, with which I hunted, packed from the Sapillo up Railroad Canyon to a creek between Gila Flats and Apache Creek.

At sunrise of the opening day the cannonading began on and around Gila Flats. Joe Peeples and I decided that we would hunt as far from the big noise as possible. We saw a number of does, some of which stopped and looked at us from 50 to 60 yards away. They made beautiful targets but we were buck hunters that day. We did not see any bucks in the morning. In the afternoon I went up on the Flats to see what it was all about. There were automobiles and camps everywhere. Hunters were well distributed over the Flats and adjoining canyons.

Deer were dashing between camps and automobiles. Each time a deer appeared the lead stocks on hand would appreciably diminish. The way some of those fellows could pump a 30-30 would put a Chicago machine gunner to shame. After hearing a few pieces of lead go singing by, I decided that there was an excellent field for a good salesman with a line of hard hats, safety shoes and shin guards, but not for me.

Fortunately we were not killed by stray bullets. In Black Canyon a hunter was accidentally killed in his camp. One hunter was hit in the leg by ricochet. Another, a son of John Harvard and a chemist by profession, shot himself through the foot. At present he is hopping about on one foot and a pair of crutches. Fortunately there is apparently no permanent injury to the foot.

Jim Bell, a member of our party, just missed the casualty list. He was in the bottom of a small canyon when a warning shout from Joe Peeples caused him to look and see a buck, about ten yards away, heading straight for him with its head down and stretched out like a man-o'-war going under the wire. Jim did not have time to raise his rifle but shot his 30-30, using from-the-hip style. This shot ruined most of a hind quarter. The deer



Caravan of Hunters in Black Canyon

jumped over some oak brush and Bell shot him through the neck while he was in the air. The buck was a ten-pointer and took the combined efforts of two men to put it on a horse to pack to camp.



On the Old Apache Trail

Dr. Robinson's horse became too lame to ride so he mounted one of the pack burros. The burro was not shod and would travel along without making any sound. If there were any deer about he would act as a pointer. If it was a doe he raised one ear, if a buck both ears. When the doctor dismounted to shoot, the burro raised and crooked his tail for a gun rest. The doctor gave us the story of this burro and it must be so, as he had a buck and doe for evidence.

Edwards, of our warehouse department, and partner camped on Apache Creek and had most of that country to themselves. They returned with two large ten-point bucks and two large does.

Smith, of the machine shop, and Gray,



Camp of the Hunters

mill operator, with Bill Richards and Doug White, helped diminish the overstock by getting two deer apiece. Smith was the only Fierro hunter to bring home a wild turkey.

Several other Fierro boys headed by Pete Loera hunted in Bear and Allie Canyons about five miles north of Fierro. Beside getting deer they succeeded in jumping a mountain lion, a bobcat and a black bear.



Looks Like the Work of Vigilantes

The historical event of the season was furnished by Gene North bringing home a deer.

The total deer taken in the two-deer area was about 2400 of which 600 were bucks. All Fierro hunters reported good hunts and most of them brought home the venison. Joe and I got white tail bucks of eight and seven points.

Midvale Flotation Mill News

F. M. WICHMAN, Correspondent

George Wright, general foreman, was the fortunate recipient of a goodly supply of elk meat sent from Evanston by a relative. We understand that he had to attend an Elk rally to learn how to prepare this regal foodstuff.

Frank Wright, a former employe at the mill and son of George Wright, together with his brother, Mark, are playing on the Freshman football team at the U. of U. this season. Lyle Reading, son of the late Jack Reading, who was a mill employe for many years, is on the Varsity football squad at the "U."

Oscar Beeney, reagent man, is very enthusiastic about the welding course he is taking at the West High Night School. He is anxious to make free repairs to broken equipment that any of the employes may have. As the work will be closely supervised by a competent instructor you may be sure of a good job.

On the sick list this month are Hyrum Beckstead, head repairman, who was recently operated on for appendicitis, and Joe Lloyd, bin man, who is laid up with rheumatism.

Among the visitors was Mr. M. L. Summers, plant manager of the Pacific States Cast Iron Pipe Co., Provo, Utah. Mr. Summers was formerly general superintendent at Hammon Consolidated Goldfields at Nome, Alaska, and later served the U. S. S. R. & M. Co. as a consulting engineer in connection with the design and construction of the dredges at Fairbanks.

A baby boy arrived at the home of Oscar Beeney on November 23. Oscar, between mixing reagents, studying at night school and helping take care of that baby sure does not have much time to worry about the "repression."

Rabbit hunting in Cedar Valley drew the attention of Everett Reading and Ralph Naisbett who bagged twenty-eight big jacks in one day. Joe Williams, with his wife and son, brought home eight.

Speaking of Naisbett, we note that he has laid aside that trusty bicycle and resorted to shank's mare. Is the bike hard to start on these chilly mornings, Ralph?

Winter fishing has been started at the mill. Ted Ray, ball mill operator, reports having removed seven minnows

from the water lines during one shift. These fish, though small enough to get through the screens at the pumping plant, choke up the nozzles at points where water is introduced into the circuits.

The cold weather has made it necessary to fire up the thaw shed and "roast" the incoming cars of ore before they can be unloaded. This has had to be done several weeks earlier than usual this year.

Others visitors were Messrs. O. D. Cunningham and M. S. Hansen, chief research chemist and flotation engineer, respectively, of the Republic Creosoting Company of Indianapolis. They were accompanied by their local representative, Mr. R. L. George. This company is entering the flotation reagent field with several new compounds.

DISPLAY FOR SILVER

The silver set from the battleship Utah will occupy two cases on the north side of the center of the lower floor of the capitol, Milton H. Welling, secretary of state, announces. One of these cases is occupied by the Cache county exhibit at the present time and the other is filled with diplomas which Utah has won in various regional and national expositions. The silver will be adjacent to the forest service exhibit which is being erected in the center of the lower floor.

Cache county will be given space near the east entrance, and on the north side of the main aisle. Weber county has accepted the similar spot on the south side of the aisle, while Salt Lake and Utah counties have the spaces north and south of the aisle from the west entrance.—Salt Lake Telegram.

The Ax-I-Dent-Ax Extends

Greetings, Best Wishes and Thanks
to

Officers, Officials, Employes, Contributors
and Correspondents
and to the
Midvale Journal, Inc.,
for Splendid Cooperation
During the Past Year

A Model of Good Nature

The best-natured woman in the United States lives in the San Juan country. She has been married a number of years to a man named Ferguson, but she and her husband have never had a quarrel yet, and he has frequently boasted that it is utterly impossible to make her angry. Ferguson made several desperate attempts to see if he could not exasperate her to look cross or scowl at him, but the more outrageous he acted, the more affable and loving she became.

Last week he was talking to a friend about what a hard time he had trying to find out if his wife had a temper. The friend offered to bet \$50 that if Ferguson were to go home drunk, raise a row, and pull the table cloth full of dishes off the table, she would show some signs of annoyance. Ferguson said he did not want to rob a friend of his money, for he knew he would win; but they at last made the \$50 bet, the friend to hide in the front yard and watch the proceedings of the conversation, through the window.

Ferguson came home late, apparently fighting drunk. She met him at the gate, kissed him, and assisted his tottering steps to the house. He sat down hard in the middle of the floor, and howled out:

"Confound your ugly picture, what do you mean by pulling that chair out from under me?"

"Oh, I hope you didn't hurt yourself. It is my awkwardness, but I'll try and not do it again," and helped him to his feet, although she had nothing in the world to do with his falling.

He then sat down on the sofa, and sliding off on the floor, abused her like a pickpocket for lifting up the end of the sofa, all of which she took good-naturedly and finally she led him to the supper table. He threw a plate at her, but she acted as if she had not noticed it and asked him if he would take tea or coffee. Then the brute seized the table cloth and sat down on the floor, pulling the dishes and everything over him in one grand crash.

What did this noble woman do? Do you suppose she grumbled and talked about going home to her ma, or that she sat down and cried like a fool, or that she sulked and pouted? Not a bit of it. With a pleasant smile she said:

"Why, George, it's a new idea, ain't it? We have been married ten years and have never yet ate our supper on the floor. Won't it be fun; just like those picnics we used to go to before we got married?" And then this angelic woman deliberately sat down on the floor alongside of the wretch, arranged the dishes and fixed him up a nice supper.

This broke George all up. He owned up he was only fooling her, and offered her the \$50 to get herself a new hat, but she took the money and bought him a new suit of clothes and a box of cigars. Heaven will have to be repaired and whitewashed before it is fit for that kind of a woman.—
San Juan Prospector, Holiday Edition, 1882-83.

Retrospection

Below is given the population of the states and territories of the United States in 1830, the 1930 population of the same states, and the slaves held in these states and territories in 1830. Some of the comparisons are interesting. Georgia had a greater population in 1830 than Utah has today. North Carolina, Kentucky and Tennessee each had a population greater than Massachusetts a hundred years ago. Note limited 100-year growth of Vermont.

	Population 1830	Population 1930	Slaves 1830
New York	1,934,000	12,588,066	46
Pennsylvania	1,348,000	9,631,350	386
Virginia	1,211,000	2,421,851	363,637
Ohio	938,000	6,646,697	0
North Carolina	738,000	3,170,276	246,462
Kentucky	689,000	2,614,589	165,350
Tennessee	685,000	2,616,556	142,382
Massachusetts	610,000	4,249,614	0
South Carolina	581,000	1,738,765	315,665
Georgia	517,000	2,908,506	217,470
Maryland	447,000	1,631,526	102,878
Maine	399,000	797,423	0
Indiana	342,000	3,238,503	0
New Jersey	321,000	4,041,334	2,246
Alabama	309,000	2,646,248	117,294
Connecticut	298,000	1,606,903	23
Vermont	281,000	359,611	0
New Hampshire	269,000	465,293	0
Louisiana	216,000	2,101,593	109,631
Illinois	158,000	7,630,654	746
Missouri	140,000	3,629,367	24,990
Mississippi	110,000	2,009,821	50,000
Rhode Island	97,000	687,497	14
Delaware	77,000	238,380	3,305
District of Columbia	40,000	486,869	6,050
Florida Territory	35,000	1,468,211	15,510
Michigan Territory	32,000	4,842,325	27
Arkansas Territory	30,000	1,854,482	4,578

The 1930 population of other states and possessions is as follows: Alaska, 59,278; Arizona, 435,573; California, 5,677,251; Colorado, 1,035,791; Hawaii, 368,336; Idaho, 445,032; Iowa, 2,470,939; Kansas, 1,880,999; Minnesota, 2,563,953; Montana, 537,606; Nebraska, 1,377,963; Nevada, 91,058; New Mexico, 423,317; North Dakota, 680,485; Oklahoma, 2,396,040; Oregon, 953,786; Porto Rico, 1,543,913; South Dakota, 692,849; Texas, 5,824,715; Utah, 507,847; Washington, 1,563,396; West Virginia, 1,729,205; Wisconsin, 2,931,006; Wyoming, 225,565.